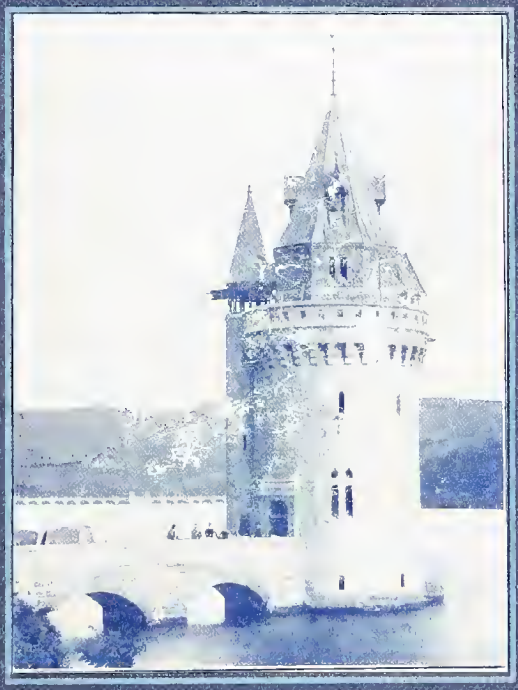
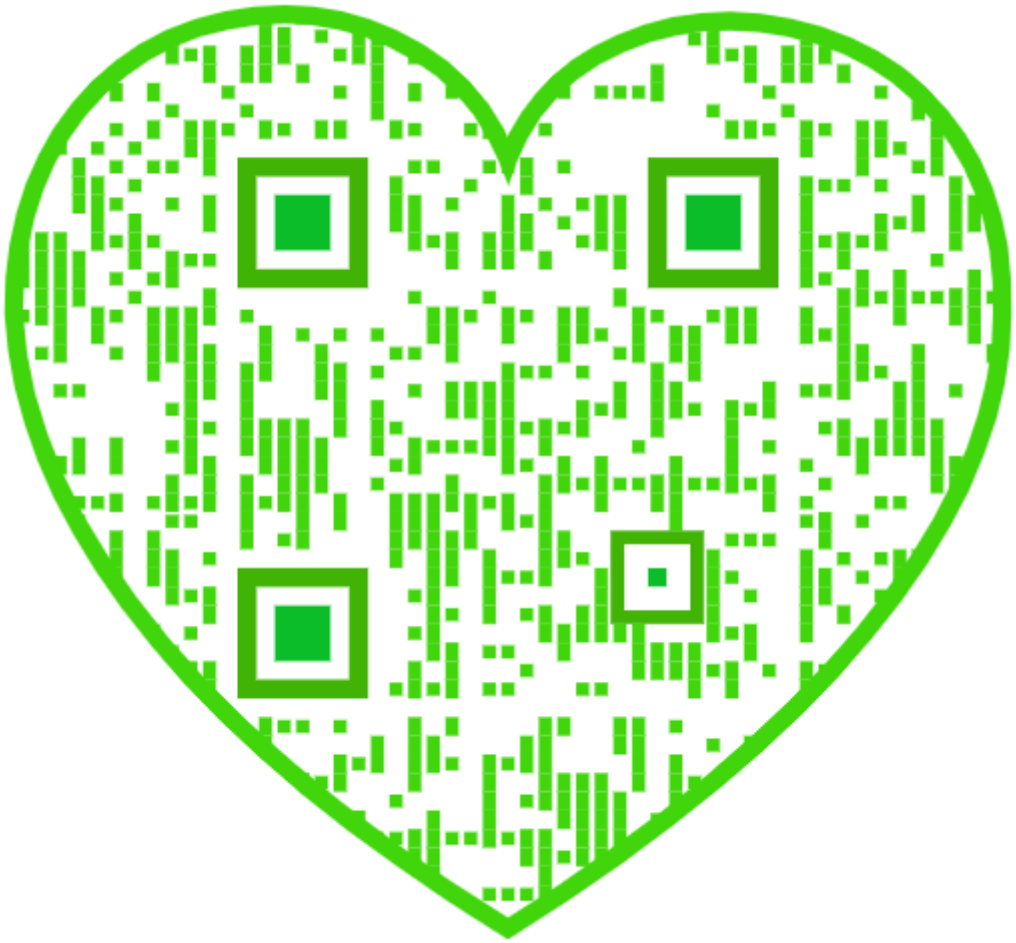
TROUT IN LAKES AND RESERVOIRS



ERNEST PHILLIPS



Cornell University

Library

OF THE

New York State College of Agriculture

Ag. 6495. 4/VIII/15.

3778

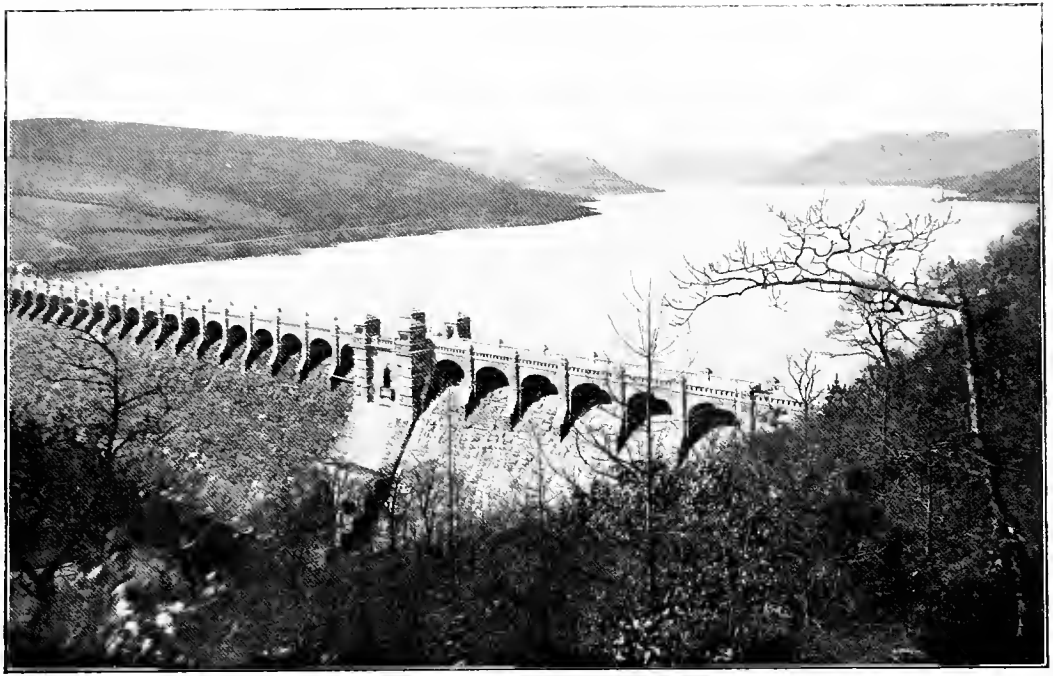
Cornell University Library
SH 687.P55
Trout in lakes and reservoirs; a practica
3 1924 003 423 971
mann

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

http://www.archive.org/details/cu31924003423971

TROUT IN LAKES AND RESERVOIRS



LAKE VYRNWY

TROUT IN LAKES AND RESERVOIRS

A PRACTICAL GUIDE TO MANAGING STOCKING, AND FISHING

BY

ERNEST PHILLIPS

WITH EIGHT ILLUSTRATIONS

LONGMANS, GREEN AND CO.
39 PATERNOSTER ROW, LONDON
FOURTH AVENUE & 30TH STREET, NEW YORK
BOMBAY, CALCUTTA, AND MADRAS
1914

All rights reserved

L.L.

@
SH 687
P55-

Ag.64 95

PREFACE

Two reasons may be given for the launching of this little book. The first is that in the whole of our angling literature there was no book which told the story of the modern development of trout-fishing in reservoirs and explained the theory and practice of this branch of our sport. The second reason, which is more personal, is that I have taken a deep interest in this subject for at least twenty years, and it therefore appeared not unseemly that I should be the one to try and fill the gap. Several of the facts and conclusions set forth in the following pages were first made public by the present writer in articles in *The Field*, *Fishing Gazette*, *Baily's Magazine*, the *Shooting Times*, *Fry's Magazine*, *Manchester Guardian*,

Daily Dispatch, and other journals, and although none of those articles are here reproduced it is well to make it clear that I have taken ideas and illustrations from them wherever they have fitted in with the general plan of this work.

E. P.

CONTENTS

CHAP.		PAGE
	PREFACE	v
I.	GROWTH OF RESERVOIR FISHING . . .	1
II.	ON RESERVOIRS	19
III.	BEST TROUT FOR STOCKING	33
IV.	FLY-FISHING	49
V.	MORE ABOUT FLY-FISHING	69
VI.	WORM FISHING	87
VII.	SPINNING THE MINNOW.	99
VIII.	CONCLUSION	125

ILLUSTRATIONS

LAKE VYRNWY . . . . . *Frontispiece*

DRIFTING FOR TROUT, BLAGDON LAKE, SOMERSET . . . . . *To face p.* 1
(*From Photo by* A. R. MATTHEWS)

THE VALLEY OF THE VYRNWY BEFORE "THE GREAT WATERS" CAME . . . . . „ 19

DONCASTER CORPORATION RESERVOIR, THRYBERGH . . . . . „ 33

LLANELLY, SWISS VALLEY . . . . . „ 49

RAVENSTHORPE RESERVOIR, NEAR NORTHAMPTON . . . . . „ 69

WEST BALDWIN RESERVOIR, DOUGLAS, ISLE OF MAN . . . . . „ 87

CABANCOCH . . . . . „ 99
(*By the courtesy of* Mr. J. ROBERTS, *Chemist, Rhayader*)

DRIFTING FOR TROUT, BLAGDON LAKE, SOMERSET

(*From Photo by* A. R. MATTHEWS)

Trout in Lakes and Reservoirs

CHAPTER I

GROWTH OF RESERVOIR FISHING

To angle for trout in a municipal reservoir is a latter-day diversion which has added greatly to the opportunities of the modern trout-fisher. It is an illustration of the theory of cause and effect. There never was a time when angling was so widespread a form of recreation as it is to-day. Indeed, it might seriously be argued that it is the most extensively practised of all the forms of sport common to the people of this country. When we find an angling association in a Midland city like Sheffield with a roll of 20,000 paying members, we may well inquire if even in that sporting city there is any other pastime which could produce so great a number of actual followers. It seems tolerably certain that Sheffield could not produce 20,000 golfers, or cricketers, or football players. And the same thing is to be said about nearly all

our populous centres. The angling fraternity outnumbers all others in the domain of sport.

Yet, side by side with the enormous growth of angling there was until recently no corresponding expansion of the opportunities for catching fish. On the contrary, it seemed all the other way about. The pollution of rivers, due to the overflow of towns into rural areas, the discharge of chemical and other noxious effluents from factories and mills, have had the effect of spoiling miles of good river-fishing, making it more and more difficult for the city angler to follow his sport within reasonable distance of his home. Where is the Bradford angler, or the Manchester angler, or the Sheffield angler to find river fishing within an hour's journey of his doorstep? His local river, to quote the words of the novelist, Charles Reade, applied to the Don at Sheffield, "is a mass of ink, stink, bubble, and malarial gas," holding not a single fish in its putrid waters, and so unlovely and forbidding that even if it did contain fish no angler with any appreciation of beauty could sit in peace by its muddy marge. The opportunities for angling, therefore, are decreasing, while the demand for fishing waters is growing. And it is tolerably certain that first-class waters, which are every year passing in greater numbers into the hands of private

owners or syndicates, will never again be opened to the general angler. When we see £200 a year offered for a mile or so of fishing on a famous trout-stream we may say good-bye to the possibility of that particular stretch ever again being open to the rank and file of those who use the rod.

The modern idea of fishing in municipal reservoirs is, therefore, one of the biggest boons ever conferred upon the angler. It is only in very recent years that it has become general, and has attained sufficient importance to be reckoned as a distinct branch of the angler's art. As an illustration, the case of Sheffield may be quoted. The corporation of that city are the owners of seven or eight reservoirs, really natural lakes, set in the grouse-breeding solitudes of the moors which cover the flanks of the Pennine chain of hills. When I lived there twenty years ago, though most of these waters held trout, the corporation had no fishing privileges, and the only way to secure the pleasure of a day's angling was by asking the local squire, who owned the riparian rights. To-day the situation is changed for the better. The corporation have acquired the fishing in one of these natural lakes—for it is simply a stream held up by a dam across the valley—and not only do they issue day and season

tickets, but by erecting shelters on the banks and spending the ticket-money on restocking, they have provided their ratepayers with passable trout fishing—not among inaccessible heights a day's journey from home, but so near the city as to be reached in half-an-hour's walk from the suburban tram terminus. Others of the corporation reservoirs in the Rivelin Valley are stocked with trout, though the Duke of Norfolk, who is the ground landlord, retains the sporting rights in his own hands; but his Grace has been so generous to Sheffield that it is not unreasonable to believe that if application were made to him, terms for public fishing might easily be arranged.

When one comes to think about it, there is no reason at all why these public sheets of water should not be used for fishing. Consider their situation. As a rule, they are constructed on the shoulder of a moorland height, say at a distance of anything from five to five and twenty miles from the town. If you take one part of the country as an illustration, the vast range of hills which hold the border line of Yorkshire and Lancashire, you will see from end to end a chain of reservoirs—sheets of sparkling water, set in heathery solitudes, in a wild and uncultivated country sacred to the grouse, the sheep, and occasionally even to the wild stag, all of

them belonging to the industrial towns whose smoke may be discerned on the horizon across the intervening valleys. Nearly every town has its municipal scheme of water supply, and in nearly all cases it implies the possession somewhere on the hills of a storage reservoir. Why not use it for fishing? If it came within the scope of municipal authorities to provide swimming baths and recreation grounds, cricket pitches, golf courses, bowling greens, tennis courts, football fields, and even cycle tracks, there was no reason why they should not provide angling facilities as well. There was the further argument that most corporations lose money in providing the opportunities for the pastimes just mentioned, but fishing could be made self-supporting. The reservoirs were ready constructed. All that was needed was to stock them with trout, print a set of rules, fix the price of tickets, and at once there was brought within the reach of anglers, say within an hour's cycle ride of their homes, opportunities for fishing which had many points of resemblance to loch-fishing in the Highlands of Scotland.

In 1905 the movement, already becoming more general every year, received a powerful impetus by the story of what was happening at Blagdon. Here was a natural reservoir in the heart of Somerset, owned by the Bristol water

authorities, which leaped into fame not only as providing a new avenue for sport, but as a potential source of revenue to its owners. Despite a charge of ten shillings a day for fishing from the bank, and a sovereign a day if a boat were used, there was such a demand for tickets that anglers had often to wait a month before their turn came round for a single day. Of course the fishing was phenomenal. Nothing like the results at Blagdon could be produced anywhere else in the British Isles. Trout up to 8 lbs. and even 9 lbs. each were then being caught. A Leeds angler had three trout weighing 19¼ lbs. in all, the biggest of the three 8¼ lbs. This catch was beaten by another of three totalling 20½ lbs., best 9 lbs. 2 ozs.; and then there came the tale of still another three reaching 24 lbs. Forty or 50 lbs. weight of trout per day regularly fell to the single rod of an expert angler. It was no uncommon experience for a fisherman to have two trout on at once, perhaps representing a total weight of 10 lbs. In 1904, when the boom began, the average weight of Blagdon trout was 5 lbs. 6 ozs. each. The publicity drew so many visitors that the weight fell, but even yet Blagdon's record is unbeaten by that of any other water in the kingdom. We have seen that the average weight per fish in 1904 was

5 lbs. 6 ozs. In 1905 the average was over 3 lbs. each; 1906, 3 lbs. 2 ozs.; 1907, 3 lbs. 4 ozs.; 1908, 2 lbs. 14 ozs.; 1909, 2 lbs. 4 ozs.; 1910, 2 lbs. 8 ozs.; 1911, 2 lbs. 8 ozs.; 1912, 2 lbs. 8 ozs; 1913, 2 lbs. 11 ozs. Scores of fish over 4 lbs. each were killed, thus making Blagdon unrivalled for big trout.

If this could be done at one place, why not elsewhere? To put the matter to the test, I sent round a circular letter to every town clerk and water engineer in England and Wales pointing out the possibilities of a municipal fishery, and requesting information as to anything that might already have been done. The result showed that several enterprising corporations had already seen that here was not only a means of providing cheap and healthy sport for their rate-payers but a possible source of profit. Nearly forty corporations had stocked their reservoirs with trout and thrown them open to anglers, and in this way trout-fishing was being popularised in England to very much the same extent that it always has been in Scotland and Wales. For there is a marked difference between the working-men anglers of the three countries. The Welsh and the Scottish peasants are fly-fishers for trout. The English artisan, through no fault of his own, has been debarred from trout-fishing, and so has become

the most skilful exponent of the art of the bottom fisher our islands can produce. The opening of the reservoirs gave him his chance—and he took it. In the Midlands and the north there are thousands of keen anglers who have never caught a trout in their lives outside their local reservoirs. Put them on a river with its alternating deeps and shallows, its pools and runs, with all its intricacies of currents and backwashes to puzzle their minds, and they would soon want to be back again by the side of their favourite reservoir.

Thus the opening out of these waters has led to a wider acquaintance with the trout, the best sport producer of all our native fishes; it has increased the love of angling; it has been a source of income to municipal bodies; it has taken artisans out of the squalid streets and murky gloom of manufacturing cities into the breezy spaciousness of moorland heights; and it has been a good thing to those who breed trout and sell them for the purpose of stocking waters. A great trade is done by owners of private streams and by fishery boards in purchasing trout for renewing stock, but from inquiries made I believe it is a fact that millions of trout are bought every year for turning down into reservoirs—a branch of trade which was practically unknown a few years back.

At the present moment, thanks to the publicity given to the success of the Blagdon experiment, and also to the demands of anglers themselves, there are over sixty municipal or urban authorities who provide angling for their ratepayers. As this book is not intended merely as a guide to these places, the details need not be set out at length. As a matter of fact, it would hardly be safe, as the conditions are always changing. One year a corporation manages the water itself. That is to say, it frames its own rules, makes its own charge for tickets, takes all responsibility for finding keepers, and buys the fish it may deem necessary for restocking when the supply is running down. After a year or so it accepts an outside offer. A local syndicate or fishing club take the reservoir on lease, pay the corporation a lump sum for the right to use it, and do pretty much as they like. They pay their own keepers, restock at their own expense, and make their money by the sale of a limited number of tickets at a price to cover all their liabilities. It will be seen, therefore, that if the conditions prevailing in each town were to be set out here an angler might next year find that the circumstances had wholly changed, and that the directions as to how and where to obtain a ticket no longer held good. Therefore, instead of going

into these purely local details it may be better to give a brief list of the various public bodies who provide the class of fishing with which we are now concerned.

After Blagdon, Lake Vyrnwy, in North Wales, may be quoted as the best known example of a corporation reservoir used as a fishing water. It is the largest and the most beautiful lake in North Wales—five miles long, and set in a scene of much natural charm. The owners are the Liverpool Corporation, who, in making this great lake, simply dammed up a stream by means of a gigantic bank of masonry. In carrying out their scheme they submerged an entire village and its parish church. The fishing is in the hands of the lessees of the hotel. Trout abound, and it is not surprising to know that the quality of the sport, combined with the glory of the view and the air, make Lake Vyrnwy one of the most popular fishing resorts in Wales. It is worth adding that, though fly-fishing is the rule, there is a section of the lake marked off by posts in which the use of the minnow is allowed. This is a concession of real value in the hot and blazing days of midsummer when the fly is out of court, as it is the experience there, as it is on all lakes, that by spinning a minnow off rocky and shelv-

ing shores the biggest fish of the year are taken.

At the other end of Wales the Birmingham Corporation have thrown open their chain of lakes in the Elan Valley, which form one of the grandest engineering feats in the history of civic water undertakings. Indeed, Birmingham may be said to lead the way in its provision of angling facilities. Apart from its waters in Wales, there are several other lakes and reservoirs owned by the corporation in the neighbourhood of the city, all stocked with fish, some with trout and others with coarser species, and they are all open at prices ranging from a shilling a day to five guineas for the season. The Birmingham angler has the choice of 860 acres of reservoirs, 90 acres of natural lakes, and upwards of 30 miles of streams, so that he is to be envied by fishermen in other cities whose rulers are less thoughtful and less enterprising. The Elan Valley lakes are a popular holiday resort, and as the angling is good, and may be varied by a day or two on neighbouring rivers, they will in time become a valuable asset to the Birmingham municipality. Fishing bungalows have been erected, and everything is done to attract the roaming angler in search of new sensations. In some of the lakes the use of the minnow is permitted.

The Bolton Corporation allow angling in six of their reservoirs; Rochdale Corporation have thrown five open. The fishermen of Barrow-in-Furness, for a nominal payment of a few shillings, have the liberty to fish four reservoirs on the fringe of the Lake District. Preston has trout in the Grimsargh reservoirs, and hard by, at a place called Goosnargh, are two reservoirs belonging to Fulwood, a suburb of Preston. The trout fishing in this series of lakes is simply splendid, and their situation, especially the Goosnargh waters, provides scenery comparable with that of the Lake District. Ten miles farther away are other reservoirs back of the hills, one belonging to the Blackpool Corporation, but the fishing rights are in private hands, and thus outside our view.

Manchester allows fishing on three of its city reservoirs, but the sport is only poor. It is singular that a great corporation like Manchester, whose name is a synonym for progress and enterprise, should be a long way behind Birmingham, or Leeds, or Sheffield, or Liverpool in the matter of finding fishing for its sporting rate-payers. This is all the more remarkable as in Thirlmere, in the heart of the Lake District, Manchester owns one of the grandest trout waters in the kingdom. Thirlmere was acquired twenty years ago as a source

of water supply, the water being conveyed to the city by ninety miles of underground piping. The lake is over four miles long, and since the corporation constructed their big masonry dam at the end of it they have raised the water-level considerably, and in doing so have submerged more than 200 acres of food-bearing ground. Before its enclosure Thirlmere had the reputation of holding the best and biggest trout of any open water in the Lake District. The possibility now is that it simply swarms with big fish—that it is, in short, a second Blagdon. All the conditions are there—pure water, plenty of food, and little or no angling. To this noble sheet the corporation issue permits, nominally free, the town clerk told me in a letter, but when I inquired on the spot, both at Manchester and Thirlmere, I was told the tickets were hedged about with so many restrictions that it was exceedingly difficult for Manchester men to obtain the privilege of a day's fishing. One Manchester angler wrote that it was easier to get to Paradise than to Thirlmere!

The reason is worth setting out. Four years ago there was a controversy as to how far local authorities may control the fishing in their own waters without interference from conservancy boards. The matter is of some importance, and will be dealt with in a later

chapter. It is sufficient to say here that a conference of town clerks and water engineers was held at Manchester in 1909 to consider this question. A day or two before the conference I published an article in the *Manchester Guardian* dealing with the subject, and to this article the late Sir Bosdin Leach, then chairman of the Manchester Water Committee, made pointed reference. He said the corporation would not allow angling in their reservoirs because they were determined to keep inviolate the purity of their domestic water supply. The answer to that is that half a hundred other corporations are just as jealous of their water supply as Manchester is, yet they do not find that angling, carried out under reasonable safeguards, is in any way inimical to the preservation of their water's cleanliness. Indeed, as will be shown later, the presence of trout is distinctly beneficial to a water, and it is possible to quote instances where corporations, after opening out new reservoirs, have found them become so foul that the introduction of trout has actually been necessary for cleansing them from their filth. Sir Bosdin Leach was surely fifty years behind the times in taking up this peculiar view. Fortunately, his ideas are not popular in Manchester, and local anglers are hoping soon to see a change in the policy

which at present shuts them out of one of the finest trout lakes in the kingdom.

Among other towns which provide trout-fishing in their reservoirs are Oldham, Sheffield, Barnsley, Leeds, Bradford, Middlesbrough, Huddersfield, Keighley, Halifax, Macclesfield, Ashton-under-Lyne, Oswestry, Northampton, Hastings, Ilfracombe, Darwen, Doncaster, Swansea, Merthyr, Llanelly, Newport, Cardiff (who own a hatchery and sell surplus trout at a profit to the town), Rhyl, Kettering, Torquay, &c., and several places in Scotland and Ireland. Quite a number of towns have coarse-fishing in lakes and rivers, open to burgesses, but this is outside our present aim. Liverpool has already been mentioned as owning Lake Vyrnwy in Wales. It should be added that the same corporation are also the owners of a chain of reservoirs at Rivington, in Lancashire, about six in number, open for trout-fishing, and as these waters are near to those owned by the Bolton Corporation, it will be realised that that part of the country is so thickly studded with reservoirs that Lancashire and Yorkshire anglers have a wider choice of good trout-fishing than is open to anglers anywhere else who specialise in this form of sport. The Londoner has certainly no such choice, for the dozen or fifteen reservoirs in which the Metropolitan

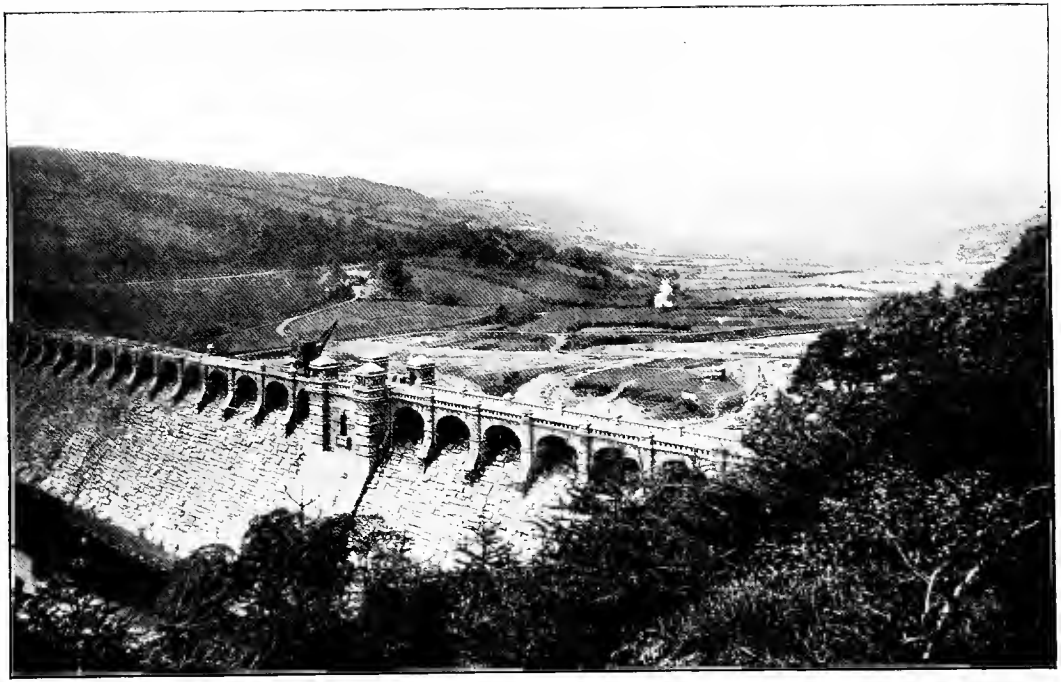
water-board allow him to fish are stocked principally with coarse varieties, so that they offer no comparison with northern reservoirs as trout-producing grounds.

A great advantage of reservoir fishing is its cheapness. Excluding Blagdon, the average cost of a day ticket is *2s.* 6*d.*, and of a weekly ticket 5*s.* Considering that many a skilful fisherman catches hundreds of trout every season, and that a season ticket is very rarely over a guinea, the sport may surely be described as cheap. As to the general conditions wading is always prohibited. Boating is allowed on some of the very big reservoirs, and where this is the case the angling is on all fours with the sport on many a Highland loch or natural sheet of water in the Lake District. Bottom fishing is often allowed, but ground bait is excluded. A good size of trout is provided, and most of the rules are so framed as to disallow the taking of small fish. An eight-inch limit is generally the smallest, and in some cases it runs as large as twelve inches, but to strike an average it may be said that the favourite limits are ten and eleven inches. Again excluding Blagdon, the records show that hundreds of trout over 3 and 4 lbs. weight are taken every year from many of the reservoirs mentioned.

In addition to size, there is generally a limit to the number of fish which may be carried away as a day's basket. Usually this may be put down at about eight. When it is remembered that an eleven-inch trout is big enough to be called a half-pounder it is obvious that no angler can complain who pays 2*s.* 6*d.* for a ticket, has a day's fishing out of it, with all the charm of a sheet of water in a moorland setting, and returns home with eight trout weighing well over 4 lbs. Besides, there is always the possibility of something heavier. Many of these waters are rich in natural food, and their trout grow to a great size. On the opening day a year or so ago, on one of these artificial lakes, I came across a dead trout floating at the edge, and on getting him out he was seen to be a full seven-pounder. We all know that the big fish come into the shallows at night to feed, and when the angler has learned off by heart the configuration of the lake, he will have learned exactly where to look for the heavy fellows when they come in at night and cruise about in bays and inlets in search of food. More than once, after a profitless day in a blazing sunshine, with no friendly breeze to cover up my tracks, I have had fast hold of a two or a three-pound fish just at the moment when the church clock on the opposite hill was

striking the hour of departure, and the exhilaration of this farewell tussle has been quite sufficient recompense for the exertions of a disappointing day. That is one of the charms of reservoir fishing—you can never tell the sort of fish which will take your fly, and this uncertainty has given many a glorious finish to an otherwise barren day.

Though I am convinced there is not much need for it, every precaution is taken against fraud and unsportsmanlike practices. The keepers maintain a watchful eye on visitors—at any rate until they learn to know them, and the practice of emptying your basket at night and having your fish weighed and booked up against you, is a certain safeguard against a breach of regulations. As a general rule no night fishing is allowed—say after ten o'clock in the middle of summer and nine o'clock later—and the sound of the keeper's warning bell is the signal to make one last cast and then to turn your face in the homeward direction, where, through the gathering gloom, the lights begin to twinkle in the valley far below.



THE VALLEY OF THE VYRNWY BEFORE "THE GREAT WATERS" CAME

CHAPTER II

ON RESERVOIRS

No sooner have we decided to go fishing in a reservoir than we are confronted by the question —do we require a licence? We have purchased a ticket from the corporation authorising us to go upon their land and even to take trout from their water under certain clear and definite limitations, but that is not enough. The rivers, streams, and lakes of this country are under the jurisdiction of boards of conservators, who have power to issue licences, and if we fish without a licence and a bailiff is minded to "take our name and address," we stand a chance of being summoned for our remissness. These fishery boards, it may be conceded at once, do a great service to the angling community. They strive to prevent the pollution of the waters under their care; they employ keepers who maintain a sharp eye on poachers; they see that fish-passes and spawning beds are kept in good condition, and they even spend money in thinning out the pike and purchasing new trout to keep the streams and lakes well supplied with fish. So we do

not grumble at the licence money—particularly when, as is the case in Yorkshire, it is no more than a shilling for the whole season.

The question is not so easy as it seems however. There is really a vital principle behind it. A municipality spend £100,000 in the construction of a reservoir. It is their own absolute property—private, away from the high road, surrounded by walls, and bearing notices forbidding the unwary or the impudent to commit a trespass. The corporation go a stage further. They buy trout with their own money, turn them into their own reservoir, and they are then faced with the remarkable proposition advanced by the Fishery Board that, having once put the trout into the water, they cannot take them out again without a licence from the Board. This is no fancy picture. It is a real statement of the case. The Fishery Boards make this claim, and they try to enforce it by legal process. A test case was tried in 1900, when the Yorkshire Fishery Board summoned a Doncaster gentleman named Nicholas for fishing for trout in the corporation reservoir without a licence, though he had paid for a season ticket from the corporation. The solicitor for the Fishery Board was asked if he contended that if a man had a pond in his garden and put trout in it he could not take them out without a

licence from the Board. He answered that that really was his contention, and that the law gave the Board control over such a pond.

The magistrates declined to convict, and so the Fishery Board took the case to the High Court. The decision there, given by the Lord Chief Justice in 1901, established a vital principle. The whole question turned on whether the reservoir in question was a "stream," that is, whether its construction was such that fish had access in and out from public waters. In giving judgment the Lord Chief Justice thought it would be a good thing if private waters of this character really came under the jurisdiction of Fishery Boards, but on the facts of this case he held that the Doncaster reservoir was exempt. He held that the water included in a fishery district must be a river or a tributary of a river, or in some way connected with a river, and that a reservoir was not included in the words, "waters within the limits of the Act!" The decision of the lower Bench was confirmed, and it was settled that no licence from a Fishery Board is necessary in the case of a reservoir like that at Doncaster.

The matter has not been allowed to stay there. It is probable that at this moment there are nearly two hundred of these sheets of water in which angling is permitted, affording

sport to thousands of anglers. Fishery Boards cast a jealous eye upon them, and regret the loss of revenue they sustain by the fact that the vast majority of these fishermen do not bother to take a licence. Three years ago the Lancaster Fishery Board applied for a new order, and it was seen that in this order they were claiming rights over the corporation reservoirs. If it were successful at Lancaster, the principle would surely become general. The corporation protested, a conference of experts from all over the north of England was held at Manchester, and it was decided to fight the "encroachments" of the Fishery Board to the bitter end. At Lancaster, however, a compromise was effected. The fishery authorities agreed to forego their claim in the case of reservoirs which have no communication with streams and rivers, while the corporation agreed to recognise their authority in the case of a reservoir which is simply an expansion of a river into an artificial lake, made by damming it up.

That is how the situation stands at the present moment, and it is highly unsatisfactory. If you make a reservoir by throwing a wall of masonry across a valley and holding up a stream until it broadens out into a lake, and you then allow the surplus water to regain the

stream below the dam, that reservoir is simply an enlarged stream, or lake, and it becomes a "water" subject to the control of the fishery conservators for that area. If, on the other hand, your reservoir is quite artificial, a pit dug out of a depression, with concrete or stone-pitched floor and sides, the water coming in at one end by a pipe and leaving it at the other end also by a pipe, it is a private possession, as much so as a water-butt at the bottom of your garden, and you may stock it with trout and angle as you please in perfect indifference to what the Fishery Board may think about your action.

Reservoirs vary in size and character. You may have them less than a dozen acres in extent, and you may have them with an acreage running into the hundreds. The favourite size is about fifty acres, with the bank indented into bays, so that the complete circuit will involve a walk of nearly a mile. The water may come in by means of a brook, which opens out and deepens gradually, and then expands into a lake. At the foot is the dam, probably nearly a quarter of a mile across, and fifty feet or more deep. In such a reservoir you have every variety of feeding and playing-grounds. The stream is a playing-ground; it is a nursery for young fish, and if the bottom is gravelly it may even

serve the purpose of a spawning bed. At the top end, where the stream has spread out over grass or meadow land, there will be a great amount of natural food, and in hot weather the shade afforded by clumps of weed is thoroughly welcome to the trout. The little bays and inlets, especially if provided with gravelly beds, are favourite resorts, and for night fishing, when the trout have come inshore for the purpose of finding food, these handy shallows may generally be trusted to yield a basket of sizable trout.

Constant acquaintance with reservoirs soon leads the angler to know where to look for the fish. They move about according to a clear and definite plan, regulated by the times of the day, the seasons of the year, and the direction of the wind. Above all, perhaps, is the desire to find food. Some fishermen make the mistake of imagining that because they were successful in a given part of the water one day, they will repeat the success a week or a month later. Nothing is further from the fact. A "hold" one day may be deserted the next. As an illustration, if you are out on a windy day, blowing dead down the lake towards the embankment, you can hardly do better than follow the wind. At the top end of the lake the water will be calm. A little further out the wind

strikes it and creates a ripple. Soon it becomes a wave, ever-growing, until by the time the dam is reached the water is storm-driven, and goodly sized waves break with a splash upon the masonry. A novice would never think of finding fish there, yet on such a day the embankment would be my favourite place. You will see the water covered with foam, as the eddying tumult sways and dashes up and down, but what is even better, the keen-eyed fisher will occasionally see the nose of a trout as it breaks the creamy surface and sucks in a fly which wind and current have carried to the shore. That is why the fish are there—because anything floating is driven there by the combined force of the breeze and the wave. A minnow lightly dropped into the seething water will be almost certain to attract a fish, and a biggish fly will have the same effect. The next day the situation is changed. The wind is in the opposite direction. Walk across the dam now and look down and you will see yards into the still clear water—but never a fish is there!

It is this faculty of understanding where to look for the fish which makes all the difference between success and failure. As soon as the expert looks at the water, and has gauged the wind and current, he knows where to make a

start. As the day draws to a close it will be seen that he is steadily making his way to some desired spot. Soon the breeze will fail, the ripple will die away, the light will fade, and he means to be ready at some point of vantage which commands a favourite feeding-place. He has learnt to read the reservoir like an open book—to know when to fish the deeps and when to fish the shallows, when to cast a long way out and when to aim his fly no farther than the streaky line which marks where the shallows end and the bottom falls away into a deeper hole.

The mouth of the stream which carries water into the reservoir is generally a desired spot for evening fishing. In the daytime the trout may have lain hidden in the deeps. As dusk approaches they come inshore, and hang about the edge of the tributary stream, not only that they may enjoy its cool refreshing water, but that they may pick up any food which is being carried down by the current. If you are fishing from a boat, row outside and cast inwards to the mouth of the stream; if you are fishing from the bank, let your fly be carried naturally by the current to the extent of your cast. Either method is certain to be successful, for the fish are there, and if you keep out of sight and present your lure with any skill at all it is sure

to be taken. So well is this fact known that on some waters anglers take it in turn to fish the favoured spot where the tributary adds its volume to the lake.

In calm weather, especially if there is no breeze and you are denied the advantage of a ripple, make a point of avoiding high banks and exposed places. To begin with, your figure, outlined against the background of a clear sky, will drive every fish that sees it into shelter. Even if this were not so, I have a theory that trout avoid open water which lies clear and transparent. Remember they have an instinct which teaches them that enemies come from above. A shadow across the water, be it human, or be it made by a bird, is a warning of nameless terror, and they dart like lightning into the safety of the gloomy depths below. It seems to me, therefore, that not only is it a waste of time to fish open water which reveals your presence, but it has the further disadvantage that you are casting your flies where they will be seen by no sensible fish. These points, and others of a similar character, may be discussed in those later chapters which will deal with the various methods of fishing suitable for reservoir work.

How do the fish find their food? In a natural reservoir, where the conditions are similar to

those found in a lake, the trout have an abundance of natural food. Every bunch of weed is rich in insect life. Every foot of the bottom is packed with larvæ of one sort or another. Caddis grub abound. There may even be a hatch of May fly. Worms and beetles are carried down by the stream, and are washed off the grassy sloping banks ; frogs are so numerous that if you fish in the dark they hop over your feet at every other step, and many of them undoubtedly fall an easy prey to the bigger fish, which probably came inshore to look for them. Indeed, a reservoir is rich in natural food, and trout are necessary to keep it within limits and prevent the water being fouled. I know of more than one corporation who thought they could improve on the scheme of nature, and keep their water supply pure without the aid of fish. But they were mistaken. Weed grew, frogs multiplied, and as the level of the water receded in time of drought it was seen that the bed of the lake was a seething mass of insect life. An order was promptly given for five thousand trout, and very soon the water regained its original purity. Not only are trout needed to keep down these varied forms of aquatic life, but it is claimed that the constant movements of the fish, and the taking of water into and out of their gills, produce some

hygienic result which actually makes the water crisper and gives it more of a sparkle.

The case is not so clear when we come to consider a purely artificial sheet of water. I have in my mind a twenty-acre reservoir into which the water fell from a pipe. It was drawn from underground springs some miles away, and had never seen daylight until it tumbled into the reservoir. It was pure and sparkling, and contained no trace of animal or insect life. The reservoir was all concrete, bottom and sides, save a small portion which was pitched with a facing of broken stone. It was a puzzle to me where the food came from, yet the trout were always in the best of condition. A certain amount of fly fell upon the surface of the lake, but it was obvious this did not satisfy the requirements of several thousand trout. There were no minnows or anything of that sort. The curious thing was that the fish seemed to live mainly on worms! I have caught trout packed with ordinary earth worms. How did they get hold of them? The sides of the reservoir were of concrete, almost as steep as the side of a house, and the bottom was of the same material. Concrete is certainly no harbourage for worms. The stone pitching might have yielded a few, but not sufficient to clear up the mystery. In part, it was explained by

the keeper. He said that worms came out of the ground some distance away, crawled to the edge of the concrete side, lost their balance and fell in the water; and to prove this he showed me several worm tracks leading from the grass to the parapet edge. But if all the worms round the reservoir had taken it into their heads to stumble blindly into the water, I hold it would never account for the plump condition of these worm-fed trout. The fact is that we have still a lot to learn of the life and habits even of the common trout, and the mystery of their food supply is not yet wholly solved. At any rate, I am still anxious to learn where the trout in a concreted reservoir pick up sufficient bottom food to put on fat and flesh and grow to a venerable age.

Some waters produce little or no food. The sides are rocky, the bottom is hard clay, bare of any sign of vegetation. As a result the trout may be of poor quality. The only thing to do is to secure expert advice and plant aquatic growths, and perhaps turn down a supply of fresh-water shrimps. One thing should be avoided like the plague. Do not introduce minnows. If you do, you will find them become a pest. They will multiply to an enormous extent, they will strip the lake of the natural food meant for their betters, and

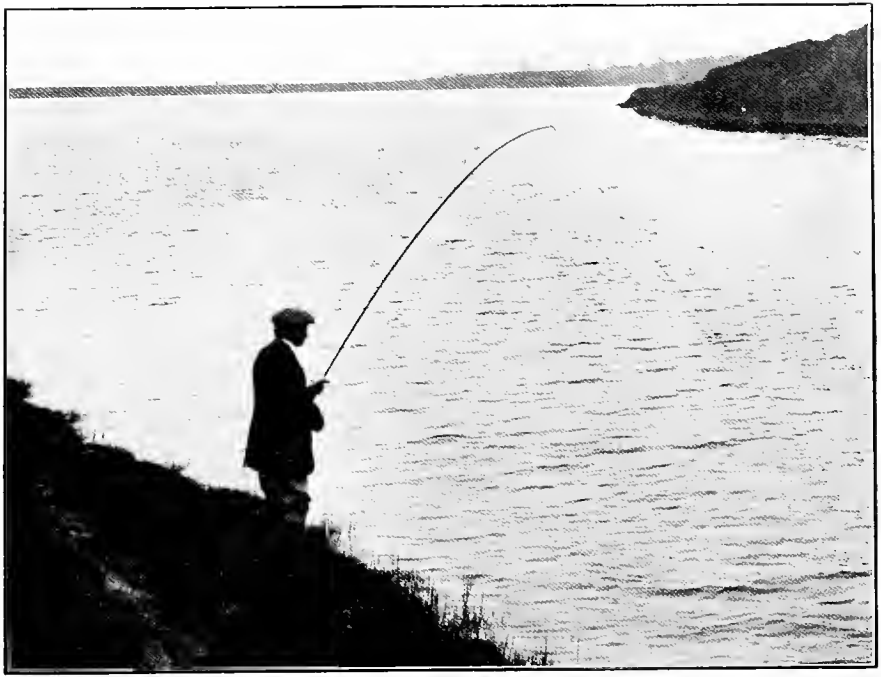
in time the trout will become so accustomed to feeding on them that they will grow into confirmed cannibals and display an exasperating reluctance to rise to your fly. No matter what happens, do not be cajoled into buying minnows.

Here are two other points relating to the structural aspect of reservoirs. If any part of the lake has water lilies, or other similar growth, or sedges and reeds in the margin, let them remain. They add to the comfort of the fish. They yield food and they provide welcome shade. The other point is one for the builder. If he can avoid monotonous straight lines in the banks it is an improvement for the fisherman. Little bays or jutting headlands, or spits of sandy shore running out like capes, give the angler a chance of getting nearer to his fish. If these features do not come in the scheme, they may be provided by driving in a few piles and laying out a plank or two over the water—like miniature landing-stages for boats. They enable the angler to bridge the weeds, to command deeper water in the daytime, and to get on more familiar terms with his quarry.

At the same time these little platforms should be avoided on bright clear days where there is only a slight breeze. It is obvious that as

they raise the fisherman above the level of the surface they make his figure very conspicuous against the sky line. If the sky is overcast and there is a strong ripple, the point is not so important, and the advantage of being able to cast out into fishable water is not to be underrated. The best use to which these little stages may be put, however, is that of night-fishing. Many an hour I have stood on them as day has faded into night, seeing nothing but the darkening sky and the dull gleam of the water, hearing the flop of rising fish all around me, and every five or ten minutes feeling the tug of a lively trout as it seized the fly and realised the blunder it had made.

In such a case do not fall into the error of trying to net your fish from the stage. Remember it is dark. The odds are that the trout will dive beneath the planking, wind your line round a pile, and end the performance by getting clear away. As you are fishing at this hour of the day with a cast which ought to be good for anything up to a Blagdon trout of 9 lbs., the safer plan is to walk ashore, abandon your net, and simply haul the fish up the beach by sheer strength of line. It is not half so risky as jabbing a net into dark water in pursuit of a fish you only dimly see.



DONCASTER CORPORATION RESERVOIR, THRYBERGH

CHAPTER III

BEST TROUT FOR STOCKING

THERE are three species of trout available for turning down into a new water, and it may be expected that I shall say something of their respective merits. The three are—brown trout, Loch Levens, and rainbows. A further question, which will be debated in its place, is the problem of whether it is better to breed and hatch your own fish for restocking, or buy full grown trout all ready for turning down when it is found necessary to replenish the supply. There is ample material in these two thorny questions for a whole chapter.

In my own mind I have not the faintest hesitation in recommending that brown trout are a long way the best fish for enclosed waters like reservoirs. Loch Levens come second, and rainbows a bad third. Ten years ago I should have put rainbows first, and those who remember how strenuously I fought for the rainbow against all his detractors may indulge in a quiet chuckle at my conversion. It is about eighteen years since Captain Ormrod, of

the Wyresdale Park Fishery, Lancashire, who was one of the pioneers of the rainbow trout in this country, took me over the premises of his splendidly equipped trout farm, and what I saw and heard of the rainbow completely fired my imagination. Since then I have been called to advise in the stocking of several waters, and, on my advice, hundreds and thousands of rainbows have been turned down. Their record has been kept, and it is because of that record, so fatal in its tale of failure, that the rainbow is now ousted from first place and relegated to the third—at least, in my estimation.

The brown trout is a native of these islands. He is the best of all our sporting fish, the most widely distributed, and he thrives in any fresh water, be it stream or lake. In Scotland and some parts of the north of England he is known as the yellow trout, to distinguish him from the white trout, which is the local name for the sea trout. It used to be argued that there were many species of trout, but it seems tolerably clear that there is only one—and that is the brown trout of England and Wales, the yellow trout of Scotland. Loch Leven and other varieties, peculiar to certain districts, are the result of different surroundings, different food, and other circumstances which may not only effect the habits of a fish but even produce

a change in its coloration. The brown trout, the most characteristic form, is a beautiful fish, full of spirit, a good riser to the fly, and he rapidly attains a great weight. There are actual records of brown trout up to 20 lbs. and even more, though naturally fish of this description are rarely met. When a trout gets up to 7 or 8 lbs. in weight he is a good fish, and if he is anything but a brown trout there is the danger that he will never be caught on the fly, but will degenerate into a cannibal, and some day have to be netted out with contumely.

In some respects, or at all events in some waters, the Loch Leven is a more beautiful fish, and when he is hooked it may be agreed that he shows better sport—having a liking for gymnastics more highly developed than you will notice in the case of his browner brother. Many people place the Loch Leven on a higher plane as a sport-provider than the brown trout. He may have earned that reputation in Scotland, but in England the balance of testimony is in favour of our native born species. Certainly the records of the fishing books kept at most of our reservoirs show that more brown trout are caught than any other variety, even though the greater expenditure may have been on Levens and rainbows. After all, that is a

good and useful test. We estimate the value of trout by the sport they provide. They are not put into the water for show, or for the mere purpose of keeping it clean, or for reproducing their kind—they are there to be caught, and the manner in which they respond to the angler's efforts is the test of their value.

Viewed in this light, then, there is no difficulty in placing the brown trout first. I have a record of a reservoir in which 6000 fish were put down, all two-year-olds. There were 2000 brown, 2000 Levens, and 2000 rainbows. The next season we started fishing, knowing there were 6000 trout to go at. There were twenty ticket holders, and some of them fished twice a a week. The season's catch was 450 brown trout, 301 Loch Levens, and only 85 rainbows. The brown trout and the Levens were much alike, many of them up to 1 lb. each, and a few over, but all the rainbows were 1 lb., several reached 2 lbs., and a few were actually $2\frac{1}{2}$ lbs. It will be seen, therefore, that the brown trout provided the best and the most consistent sport. Rainbows gave the heaviest fish, but they were erratic and disappointing. They would be on the feed for a day or two and then vanish from view, and it was no uncommon experience for a whole week to elapse and not a single rainbow be returned to the keeper's list, though

fifty or more of the other two varieties were caught in the same length of time.

As for Loch Levens, I believe it is a fact that as a rule they do not grow to as great a weight as brown trout or rainbows, and that a fish of 4 or 5 lbs. is a monster. At any rate, searching through another keeper's book and taking a period of five years to allow for good and bad seasons, I find that only 60 Levens were killed over 2 lbs., as against 225 brown trout, and 74 rainbows. So that brown trout may be said to be not only the best rising fish, caught in greatest totals, but to yield the largest number of heavy specimens.

The rainbow trout has many splendid qualities. He has more dash and mettle than any other inland trout, resembling the sea trout in his love of adventure and in his grim fighting qualities when first he feels the sting of the steel. When he came to this country we saw nothing but his good points—we had to find out his defects by bitter experience. To begin with, rainbows are no use at all for rivers. They disappear down to the sea very soon after they have been liberated. It might be thought that the rainbow would find it hard to exercise this faculty for getting away from lakes and reservoirs and ponds, but it is apparently just as easy for a stock of rainbows to disappear from

a fenced and walled-in reservoir as it is from an open river. Until this was discovered there had been a great run on rainbow trout, and thousands upon thousands had been turned down in municipal reservoirs. Fishery committees argued, and apparently with reason, that this was just the fish that was wanted. He grew more rapidly than any other, he attained a greater weight, he had more dash and courage, and if his only fault was in running away, this could be easily overcome by placing him in a land-locked reservoir, which apparently gave him no chance at all of giving play to his roaming disposition. But when reservoirs had been stocked with countless numbers, and after two or three years they were drained and found to be empty, a reaction set in, and to-day this drawback is so generally recognised as a fatal blemish that he is deposed from first position and takes his place after our British-born varieties.

There can be no doubt that if it were not for this fatal habit he would long ago have ousted his rivals. His growth is simply phenomenal. Two-year-old fish, sent out from the hatchery seven inches long, have been caught the following year up to $2\frac{1}{2}$ lbs. each. Here is a remarkable case, which may be authenticated. Two hundred rainbows were turned into a small

water. They were fifteen months old and about eight inches long. Two months afterwards some were 1 lb., and a few others 1½ lb. The following year, when they were only two years and five months old, they were caught ranging from 2 lbs. to 3 lbs. 14 ozs. The owner of a private water at Bath killed a 9 lbs. rainbow on the fly, and he vouched that it was only four years old. The owner of another lake turned rainbows down as an experiment, and when they were nearing three years old he netted a dozen out and weighed them. They averaged 7 lbs. each. It is evident, therefore, that in a suitable water rainbow trout develop more rapidly than any of our native breeds. To turn down yearlings and catch them next year up to 2 lbs., next year up to 4 lbs., and the fourth year up to 9 lbs., is to suggest an angler's paradise.

But what is the use of these big heavy fish if they are reluctant to be caught? It may be granted that occasionally the rainbow has his voracious moments. I recall the case of an angler who fished a lake in Kent for the first time since it was stocked with a thousand yearlings the previous year. He was limited to eight fish. He took his limit under four hours. The eight fish weighed 19¾ lbs.—biggest, 3½ lbs. Yet they were only two-year-olds! Next day the angler returned to catch another eight.

As a matter of fact he caught fourteen, and the eight he was allowed to keep weighed 21 lbs. In other words, the sixteen fish he was allowed to carry away weighed 41 lbs. It is obvious, therefore, that when rainbows permit themselves to be caught they give as good sport as anybody could wish. This is the experience at Blagdon, where, reversing the state of things at every other place of which I have knowledge, actually more rainbow trout are caught than brown trout.

What we have learned on this subject may thus be summarised. Take an ordinary lake or reservoir and stock it with brown trout and rainbows, and you will find that the rainbows yield best the first year; the second year they will be about the level of the brown trout; and in the third and succeeding years they will fall off altogether. The rainbow trout develops more rapidly than others, he is a more spirited fighter, and so long as he can be induced to rise to the fly he provides the most exhilarating sport an angler may desire. But there is a limit to his usefulness. He ceases to have any practical value three years after he has been turned down. You can only maintain the fishing in a rainbow-stocked water by putting down new fish every year. It was at one time argued that a mistake was made in placing rainbows in the same water as other fish, but this theory

is obviously absurd. The rainbow is a hardy creature, quite able to look after himself, and the fact that at Blagdon and other places he has thrived so well in the company of brown trout and Loch Levens proves that this excuse for his bad habits is altogether unsupported.

The great problem of the rainbow may be stated in the form of two questions—why do they cease rising, and what becomes of them after they have reached the age of three or four years in waters where they are never again seen to rise to a fly? That they do stop rising all of a sudden is a most remarkable thing. I fished a lake one season and caught rainbows nearly every visit. Next season I caught two the first month, and then I never saw another. I have in mind another reservoir where a thousand were put down one year, and another thousand the next. According to the keeper's books, about 400 were caught by fishermen. That should have left 1600. Two years have elapsed, and not more than about thirty have been caught. Where are they? Are they feeding at the bottom, or have they cleared out altogether? My belief is that they have vanished out of the water.

This disappearance of rainbow trout has perplexed fish breeders and owners in every part of the country. They complain, not merely that

they seldom catch rainbows, but that they rarely ever see them. They must get away somewhere. A correspondent of *The Field* recently threw some light on this problem. He turned fifty rainbow trout into a lake. None were found dead, yet they all vanished, though the inlet and outlet were wired. One day, looking at a pipe which fed the lake, he saw the tail of a trout in it. The force of water pouring down the pipe pushed the fish out, but it was so determined to get away that it made five or six attempts to ascend the pipe, getting its head and shoulders in, and each time being forced out again by the flow of water. Failing in this, it bored into the bank beneath the pipe! What are we to argue from this? Surely that the impulse to roam had seized the fish and that at all costs he was determined to make his escape. And the manner of his attempt probably threw some light on the whereabouts of his erstwhile companions in captivity. These facts prove that rainbows are migrants. Whether it is worth while to try and acclimatise a fish which is so determined not to stand upon the order of his going is an open question. Certainly most attempts to keep him have been more or less failures. A Cumberland lake was stocked with 30,000 as an experiment. Fewer than a dozen were taken on the fly. The minnow brought

no success at all. None of them have ever been seen since. Are they still there, living on ground food, varied by a cannibal diet, or have they got out in some mysterious way?

The proposition that the rainbow is *not* the most suitable fish for placing in reservoirs needs no further elaboration. He is game and full of fight, but his vice of falling away from the fly at the end of the third year and then of vanishing from human ken, wipes out all his good points. If you want regular and continuous sport, you are advised to rely upon something more enduring than the flighty and the erratic rainbow trout. It is for these reasons that preference is given to brown trout and Loch Levens for the class of reservoir with which this book is mainly concerned.

Before passing on to the question of restocking, it may be as well to answer in advance a question which is likely to be raised. Should coarse fish be placed in the same waters as trout? Experience is dead against the adoption of such an idea. It may be urged that in a state of nature trout and coarse fish are found together, as in the waters of the Lake District, the lochs of Scotland, and some of our best rivers; and it is a fact that a fair head of pike, provided they be kept well in hand, do good by thinning out the weakly trout and increasing

the average size of those that remain. It is an illustration of the survival of the fittest. But in a purely artificial water, where the conditions are under the control of expert fishermen, there is no need to rely on pike or other outside agency for regulating the fishery. Trout are good enough by themselves, and it is a mistake to give them companions of a different breed. Besides, what would you have? Pike are out of the question. Eels will find their way in of their own accord, and do sufficient damage without anybody wishing to see their numbers increased; carp and tench do not take to the cold deep water of lakes and reservoirs; roach and perch are common enough elsewhere; and the rudd, which has been tried in one or two waters because it takes the fly almost as readily as a trout, increases so rapidly as to become a nuisance.

It is a vital error to stock with anything but trout. If you have three or four reservoirs to go at, and the artisan anglers of the district are asking for coarse fish, do as is done by the Birmingham and Bolton Corporations: stock one water with roach and perch and other of the coarse varieties, and thus provide angling of every sort and for every taste. But under no circumstances is it wise to make good trouting poor by mixing it up with an inferior form

of sport. To put roach in a trout water is like putting plum-pudding and turkey on one plate. Each is good enough to be served separately. To mix them is to spoil both.

Many corporations, and in some cases the syndicates who lease the angling rights, have adopted the idea of running a little hatchery of their own and breeding fish for the purpose of re-stocking. Unless every facility is at hand, and you have the right kind of men to look after it, this plan is very troublesome, and often results in failure and loss. Fish breeding is now a business, conducted on highly scientific lines, and trained knowledge is in every way more desirable than the bungling of amateurs. To run a fish hatchery you require stew ponds to accommodate the big breeding fish, a hatching house with grills and boxes, and then you need ponds for the fry until they have reached an age when they are big enough to be turned down and look after themselves. Moreover, the lake or reservoir should either have an end screened off, say a little bay planted with weeds for shade and food, or it should be fed by a tributary brook used for the same purpose. Then the fry can be turned down, and when they are old enough and big enough the screen may be removed so that they may find their way into the deeper waters.

The whole thing is attended with difficulty,

unless the concern is big enough to pay for the services of a professional from a hatchery. It is not one amateur in a hundred who has nerve enough to take a struggling trout of three or four pounds weight, icy cold on a biting day in December, and strip it of its eggs ; and the ordinary keeper certainly cannot be expected to have sufficient knowledge and experience to look after the eggs and watch them until they are fit to be removed. The slightest bungling with the water supply, and the whole of a season's eggs, thousands in number, are irretrievably ruined. Then there is the further problem—what is to be done with the fry when they have left the alevin stage? They are now perfect fish, an inch or more in length. Where are you going to put them? Unless you have land to spare and can build protecting ponds for them, and can train the water supply in such a way that a constant current is playing over them, they will have to be put in the reservoir. This is simply a temptation to the older fish to become cannibals. Remember, the reservoir holds thousands of trout, many of them big, and all of them hungry. The introduction of twenty or thirty thousand troutlets into this voracious company can only be regarded as a gigantic blunder and a waste of promising material. Ten to one the majority

of the fry are eaten, and there is the further danger that this great banquet off their own species may give the older trout their first impulse to a career of cannibalism which may have the worst possible effect on the fishery.

To pay for itself a fish-breeding establishment must do a great business. A few of the corporations who now run their own hatcheries produce more trout than their waters require, and by selling the surplus to other water owners they make their money and possibly a bit more. This suggests the idea that three or four owners of waters should combine and work one hatchery amongst them, seeing that it is hardly possible to make small hatcheries pay for their maintenance. A tremendous amount of money is lost by amateur fish-breeders. A committee thought to improve Lake Windermere by re-stocking it with trout. Despite the best of advice they started a hatchery, and though they had the advantage of an ideal site, a splendid stream running into the lake, they had to suspend operations in five years, having lost £2300.

The cheapest and the best way to obtain new stock is to purchase full-grown trout. Two-year-olds, all ready for putting down, may be purchased at about £30 per thousand. There are nearly fifty hatcheries in this country,

and it is not difficult to choose one near enough at hand to make the bill for carriage quite a small item. Orders should be given early in October, so that the fish may be sent away before they have been picked over and only the poorest left behind. The fish are sent out in squat tins like milk cans, and as soon as they arrive they should be taken to the side of the reservoir. As a rule, the business of transportation is so splendidly managed that it is possible to send a thousand trout a hundred miles and not a single fish be any the worse for the journey.

Putting the fish into the lake is not so simple as it might appear. The novice would think that all that is necessary is to up-end the tins in shallow water and allow the trout to make their escape. To do so would probably end in the death of the bulk of them. The change of temperature would be fatal. Instead of so dangerous a method, the operators bale water out of the lake into the fish cans, and then let it out, and keep on refilling until all the water in the cans is lake water. They allow the fish to remain a bit longer, to get used to it; then they carry the cans into the shallows, gently lay them on their sides, and the fish dart out. And so we leave them, hoping next time to make their acquaintance when we venture forth in hope on capture bent.

LLANELLY, SWISS VALLEY

CHAPTER IV

FLY-FISHING

In reservoir fishing, as in any other branch of angling in which trout are concerned, the use of the artificial fly ranks high above all other methods of fishing. At the same time, it is not admitted that the fly is the deadliest lure. My own experience, acquired on more than fifty reservoirs, leads to the conclusion that if angling is to be judged solely by results, then worm-fishing has no equal. We must not lose sight of the fact that the vital principle of angling is catching fish. Nor must we forget the further fact that the idea underlying all our sport is to offer food to the fish, to take advantage of his cupidity or his hunger, to catch him by a trick. Therefore, in the matter of ethics, one form of lure is quite as legitimate as another. It does not matter whether you offer a Zulu, a real May-fly, a worm, a minnow, or a caddis grub, you are trying to deceive the fish by offering him something to eat. If we keep this simple thought before us we shall realise that the lad who yanks

a trout from a muddy river by means of a worm and a string is, in his way and according to his lights, putting into operation the same principle as the dry-fly angler who stalks a feeding fish on a Hampshire stream. The difference between them is not of principle, it is merely a question of the degree of skill exercised.

So I come to the question of lures with a mind cleared of cant, prepared to argue that in season the worm is quite as sportsmanlike as fly-fishing. There is really room for greater tolerance in angling. Superiority in any one art lifts men to a dangerous elevation. We all remember how a few years ago the dry-fly man hurled sneers and insults at the wet-fly man, and christened the art he himself had only just abandoned, the "chuck and chance it" method. Similarly, the ordinary fly-fisher looks with contempt on the use of the worm. In the proper chapter I shall be prepared to defend the worm as a legitimate lure even for trout, but here it is enough to say, speaking solely of its deadly effect, that if two expert anglers set themselves out for a season's fishing on a well-stocked reservoir, one always using fly and the other always using worm, the man who uses the worm will end the season with a bag nearly twice as big as that which has fallen to his rival.

But fishing must not be judged solely by

results. The man whose season's sport is merely expressed in numbers and weights ought never to have been an angler. Nature intended him for a fishmonger. If we regard fishing as sport, and if by sport we include skill, art, delicacy of methods and keen enjoyment in the use of our appliances, then fly-fishing comes first. I have no hesitation in saying that fly-fishing on a reservoir requires almost as much patience, and application, and study of the nature of winds and the movements of currents, keen understanding of the food question, and above all a true sympathy with the moods and temperaments of fish, as does fly-fishing on a stream. The whole sheet of water is before you. There is no sign of movement. Not a single fly is visible on the water. As far as the novice may see, one part of the lake is as good as any other, and there seems no more reason why he should put on a March-brown than a bracken clock. What fly shall he take? Which side shall he work? Where are the fish likely to be? It is the answer to these questions which marks out the novice from the expert. Apparently, fly-fishing on a reservoir is the exemplification of the "chuck and chance it" system. Only when you note the difference in the methods of the expert and the novice do you see that

the work of the former is based upon a deep-laid plan.

There is room for variety in the implements to be used. In the matter of rods, your choice should be for something stiff and strong, not too whippy to accommodate itself to a long line, but yet with sufficient bone in it to cast well out in the teeth of a gale. Whether the rod be of cane or greenheart is a matter of taste and personal liking. After using both for many years, I have settled definitely in favour of greenheart. On the whole, it appears the stronger of the two, and strength, or casting power, is a first necessity in a reservoir rod. Unlike stream fishing, where you may wade close up to your fish before you cast, you are confined to the bank, and the only means of communicating your fly to a rising trout is by your rod. Hence, you must be able to cast well out. Sometimes, say for twenty yards out, the lake is calm, without a stir. Then a ripple begins, and just beyond it you see a school of playing trout. There can be nothing more aggravating than to cast short every time, your fly missing the ripple by a yard or two and falling on the glassy surface this side of it, where flies and cast are plainly seen by the fish to be a rank imposture.

Or the wind may be blowing dead on to the

shore. Between the bank and a ten-yard limit any number of good fish lie. A ten-yard cast seems nothing, but try it in the eye of the wind, and if for the first few casts the line is not oftener round your neck than on the water, you are an exceptionally good beginner. In such a case the idea is to cast obliquely into the wind, to cut sideways into it, and you may only do this by two things—first, knack, and secondly, a rod possessed of great driving power. If there is one thing more clear than another about fly-fishing in all weathers on a big reservoir it is this—that the modern craze for light rods, the sort of things that can be sent through the post for a penny, will be expensive and disastrous to any who are so ill-advised as to take it up. Strength, durability, and above all, casting power, are the three essentials in a rod for reservoir work.

As to the length of the rod, there is great divergence of opinion. Within limitations, this should be settled by the physical strength of the angler himself. Half a day's casting in a gale with a ten-foot rod will tire some men completely out, while others can cast all day with a fourteen-foot grilse rod and never turn a hair. One has occasionally seen double-handed rods used on reservoirs, and though there is something to be said for it on wild blustery

days, or on calm evenings when the fish are rising a good distance out and long casting is necessary, it seems a principle that has not much to commend it. To use a fourteen-foot double-handed salmon rod to kill a pound trout is very much akin to taking a pike rod to slay a roach. Trout should be fished for with trout tackle. Hence anything over twelve feet seems undesirable, and on some reservoirs this limitation is expressly set forth in the rules. For many years I have used nothing above eleven feet, and my favourite weapon now is a stiffish greenheart of only ten and a half feet.

In fishing a reservoir little baggage is required, and this is a good thing, as few forms of angling involve so much work. The angler is always on the move, he is perpetually casting, and at every cast he has to work the flies himself. There is no current to carry them over the head of a rising fish, no movement of the water to give them the appearance of life. Everything has to be done by the angler's right arm. The less he has to burden himself with the better for his comfort. He may carry a bag, slung over his right shoulder, thus bringing the bag on his left side. On the front of the strap, about the height of his breast, he may have a ring sewn to it, and through this he may hang his net, so that it

may clear the ground as he walks. With a pigskin purse for casts and oddments, and a metal box for his eyed flies, he has all he needs. In one of his pockets he should carry a disgorger and a small priest for dealing the death-blow to captured fish.

The line should be well greased, not only to help it to float, but to keep it from becoming water-logged. There are many expensive preparations on the market for this purpose, but after trying them all the present writer has fallen back upon "Lanoline," a face preparation for use after shaving! A sixpenny tube lasts me nearly a whole season. It thoroughly greases the line, does not soon wash off, and it seems obvious that a preparation meant to be soothing to the human skin can do no harm to a fishing line. Some anglers do not attach much importance to their line being greased. Its great advantage lies in the ease with which you are able to recover your line and flick it off the water for another cast. In stream fishing, the current helps you, whether you are casting up or down. If you are casting up-stream the current brings the line down to you, and if your rod is lifted up the line is automatically taken off the water, and its recovery is thus made easy for the next cast; while if you are fishing down-stream, the current extends your

line to the full limit of the cast, and the force of the water prevents it sinking, so that its recovery is a matter of strength and knack.

Consider what happens when you make a ten-yard cast over a reservoir. The line is extended before you as straight as a ruler. Unless there is a breeze to drive it inshore it will stay where it is and gradually sink. To prevent this you lift the rod and gradually work the flies towards you, until you have brought them to a yard or more from the bank. If you have done this properly your line is pretty well up in the air, and what is not in the air is lying on the water, and it is here where the greasing is of real advantage, for the moment you flick the balance of the line off the water and shoot it backwards in readiness for another cast, you will see how smoothly and sweetly it will leave the water; whereas if it were not greased it would stick and have to be lifted off by sheer force of muscle. Never use strength if art and cunning will save it, and one sure way is to have a thoroughly greased line.

Casts may be of varying thickness, to suit the size of the fish expected to be met. As you really never know your luck in reservoir fishing it is best to have strong gut. It is very aggravating to have a day among the half-pounders and land them all with ease, and then

suddenly find yourself with a rainbow of four or five times that weight, and lose him after a three or four minute fight through the snapping of the cast. On the other hand, thick gut is dangerous, for the water is of crystal clearness, never muddy or coloured, and with no current to hide its nature. It stands out in all its brightness, a danger signal to the fish, warning them away. You need the best gut money can buy. In my own case I ignore the tackle-maker's ordinary list and have my casts specially prepared—ordering the thinnest possible gut that will stand a three-pound test. As I never remember losing a fish by the breaking of a cast since this experiment was begun, it may be said to have been a success. For night fishing, that is, the few hours that remain after sunset and closing time, sea-trout casts may be used. There is now no necessity to fish fine, and as you are never sure when your fly may be taken by a fish of four or five, or even six pounds, it is perfectly obvious that you are justified in using tackle strong enough to retain your hold of these occasional monsters. Telenara, the new gut substitute, is often used on reservoirs. In fact, a Yorkshire parson of my acquaintance was one of the first to introduce it in this country. It was used by Japanese surgeons in the Russo-Japanese war,

and he obtained it from an army friend, and soon after then it was popularised as a substitute for gut. I sent a sample to Sir Herbert Maxwell, and since then its sale has been rapid. It has many good qualities, but personally I have not been able to take to it as a substitute for gut.

How many flies should there be on a cast? In Scotland the custom is to use four at once. In the English Lake District, where tarn fishing approximates more nearly to reservoir fishing than anything else I know, the number is three. It is obvious that the greater the number of flies offered, and the wider the variety, the better chance there is of success; and the fact that on well-stocked lakes it is no uncommon experience to rise three trout at once, and sometimes land them all, proves that the number is not excessive, and that the presence of three flies in Indian file suggests nothing out of the way to a trout's suspicious nature. On some reservoirs, where the habit of using very large flies has grown until it seems impossible to take fish on ordinary sizes, two are quite sufficient—that is, the point fly and one dropper. Those, however, are matters to be decided by local conditions. To quote myself, I was brought up to use a cast of three flies, but latterly I have found two quite enough. For

night-fishing there is no need to use more than one. By doubling the flies you double the risk and danger of getting into a tangle.

When we come to the choice of flies we come not only to the most debatable part of our subject, but to the most interesting. Every angler is an authority on flies—or at least he thinks he is, which is pretty much the same thing. He has his favourites, and he swears by them. He will open his case and show you some composite creation, "Thompkins' fancy," and tell you how, when all else failed, he made a great basket with this particular fly, when nobody else was getting a rise; "and, sir, that fly has never failed me since." There is something to be said for this abounding faith. A man has persistently tried a certain fly above all others; it served him well, and he is perhaps justified in sticking to it. But there is nothing which gives rise to greater diversity of opinion than the cult of the fly. Hence we see a hundred or more different flies on the market—and anglers willing enough to buy 'em all. It is good for the tackle dealer, and the angler has the satisfaction of opening his box and admiring their pretty colours as they lay there in serried rows. For when all is said and done, though the multiplicity of new creations is really a farce, a well-filled fly-box is

a thing of beauty, and is a joy to any angler's soul.

The cult of the fly is surrounded by a mass of prejudice. For instance, there is the fetish of the "local" fly. It may be true that in some districts a certain fly has taking qualities above all others, but is this due to its real superiority or to the fact that anglers use it to the exclusion of all others? Track the history of the "local" fly and you generally find that the real explanation is the latter of the two theories just suggested. One day, a way back, an angler had a good basket with a certain fly. He told his friends about it. They copied it. For years they have practically used nothing else. Is it not likely the "local" fly catches more fish than any others, when it is used with such system and regularity? If the reader were to go into such a district he would be told all about the "local" fly, and would be warned that trout would look at nothing else. If he is a wise man, while not disregarding any help that may be offered him by men on the spot, he will use his own judgment. He will take account of the season of the year, the time of the day, the state of the water, the temperature, and a dozen other factors, and then he will use the fly which seems best suited to these conditions. And if he is an expert angler, and

the fish are there and are on the move, the odds are that he will do as well with the lure of his choice as he would with the "local" fly.

There can be no doubt that there are far too many flies on the market. A recent book on angling gives the names and dressings of 156 different flies for use during a season which lasts only seven months. The angler who takes the advice of that author and obtains, say, only three of each sort, will require 468 flies in his boxes. The thing is simply madness. In other words, he will need over twenty different flies for each month. Yet Stewart, one of the greatest and most successful anglers of his day, was content with half a dozen flies for the whole season. Between the museum of 156 specimens on one hand, and Stewart's pill-box and its half-dozen on the other hand, there is surely a happy medium. The whole business, it seems to me, has arisen because we over credit the ability of the trout to detect one fly from another. For my own part, I do not give trout so much credit on this score. I do not rate their discernment higher than man's. A blue dun from one maker has been so much like a blue upright from another that half a dozen anglers were ready to swear they were exactly alike. I have seen red palmers, bracken clocks, and cock-y-bondhus so much alike that,

when mixed up, it was hard to tell one from the other. Yet we are to suppose that trout have so much discernment that they can pick out and "place" these flies where even an expert angler is puzzled!

What we have yet to discover is how far the trout understand the scheme of colour, and whether we are not throwing away upon them our gradations of blues, and reds, and yellows, and browns. The finicky difference between one fly and another, only apparent after diligent examination by the trained eye of the angler, often ceases to be a difference at all when the flies are soddened and water-logged and the dressing is flattened against the shank. Give me a few broadly defined colours, suited to the natural surroundings of spring, summer, and autumn, and a few special creations which resemble nothing in nature, but have all the weight and authority of standards, and I am quite content to pin my faith to less than a score varieties for the whole season.

This tendency to reduce the fly list is no new thing. The Duke of Rutland says he can manage with a round dozen. Mr. Halford, the dry-fly purist, has brought his list down to eleven. Sir Edward Grey's book shows he is satisfied with four—olive quill, iron blue, red quill, and black spider. As befits the disciple,

Mr. Sydney Buxton, M.P., accepts these four, but pleads to be allowed just four others—hare's ear, Wickham, silver sedge, and alder. Going further still with the process of weeding out, if there were only one fly in the world the editor of the *Fishing Gazette* would like it to be a Wickham, while if the choice were left to the ex-editor of *The Field* it is to be assumed he would pin his faith to the red spinner. If it is not presumptuous to bring myself into this exalted company, I am so perplexed with the rival claims of Wickham, Greenwell, and March-brown that I have not yet made up my mind.

All the same, it is necessary to come to a decision as to which are the best flies for reservoir work. The two favourites are Wickham's fancy and Greenwell's glory, and they run such a neck and neck race that neither has so far beaten the other. It is to be noted, by the way, and as a refutation of those who hold that fly-fishing is most successful when we copy nature, that both of these flies are artificial creations, with little resemblance to anything in nature. Many a time, using a cast with both these flies, I have hooked and landed two fish together. At the beginning of the year the March-brown is a powerful rival, and for a time it is to be preferred to Wickham, a cast for the early weeks

of the season being made up of March-brown at point and Greenwell as dropper. In the Lake District, where I had a lot of my schooling on the tarns which abound in the hollows of the hills, the three favourite flies for the whole year are March-brown, Wickham, and Zulu. The three flies may be altered in position according to varying conditions, but, generally speaking, an angler in the lake region will be found to have two of these three flies on his cast all the year round. Personally, I have not found the Zulu such a killing fly in other parts of the country, though I have killed fish with it at all seasons of the year. Anyway, it is not now a first favourite, though if restricted to a dozen flies, or even less, I should be sorry indeed if compelled to part with this tried and serviceable creation.

The general experience of Greenwell's glory is that it kills well all the year round, and in nearly every kind of weather. To that extent, and to that extent only, it beats the Wickham. There are times when trout are dead on the Wickham, and in a good water you may reach your limit of eight or ten fish in an hour or so with it, and the memory of days like that naturally predispose one in favour of the fly that served so well. On the other hand, on a blazing hot day, and even on a moderately warm

day if the sky is clear and the sun is bright, the Wickham fails to attract. It is too bright, too gaudy, and, perhaps, one may say, in such a water its obvious unreality is too transparent for even the simplest-minded trout to be deceived. This may never be said of the Greenwell, which is suitable both for warm and cold days, dull and bright days, early mornings and late evenings. So, though I began by saying that Greenwell and Wickham were equal favourites, I end my dissertation upon them by the admission that I have now persuaded myself into putting Greenwell first.

The March-brown is a fly to be used all the year round, though its greatest service is done by the end of May, and it is not of much good again until we near the autumn. Woodcocks are useful lures, in particular the woodcock and hare's ear, on which fly I caught my biggest trout in the daytime, a few ounces under 4 lbs. The red palmer is full of service, particularly in June and July, fished at the hour of dusk, when, under ordinary circumstances, a coachman is recommended by other authorities. My experience of the coachman is that he ceases to count after it has become so dark that I cannot read my watch, and then, in June and July, a big red palmer takes his place until night has fallen. On a wild water, with a lowering sky,

a small silver doctor makes a very good lure, and in the same circumstances other anglers are prepared to swear by an Alexandra ; but the Alexandra has never entered into my affections, and the few occasions on which I have tried it were not attended with such success as to make the fly a favourite.

When the bracken clock is out, either that fly or a coch-y-bondhu takes well, though both these lures are variable. In the Lake District the bracken clock time is one of the most bustling periods of the year, and tremendous baskets are made with it ; but elsewhere, though I have tried it persistently, results are not up to the standard of the lakes. The same thing may be said of the floating beetle, a standard lure on Lake Vyrnwy and other reservoirs, yet on a dozen different sheets of water I have seen it tried with no success at all. The fact is that reservoirs and trout have their peculiarities, and standard flies that do well in one county are perfectly useless in another.

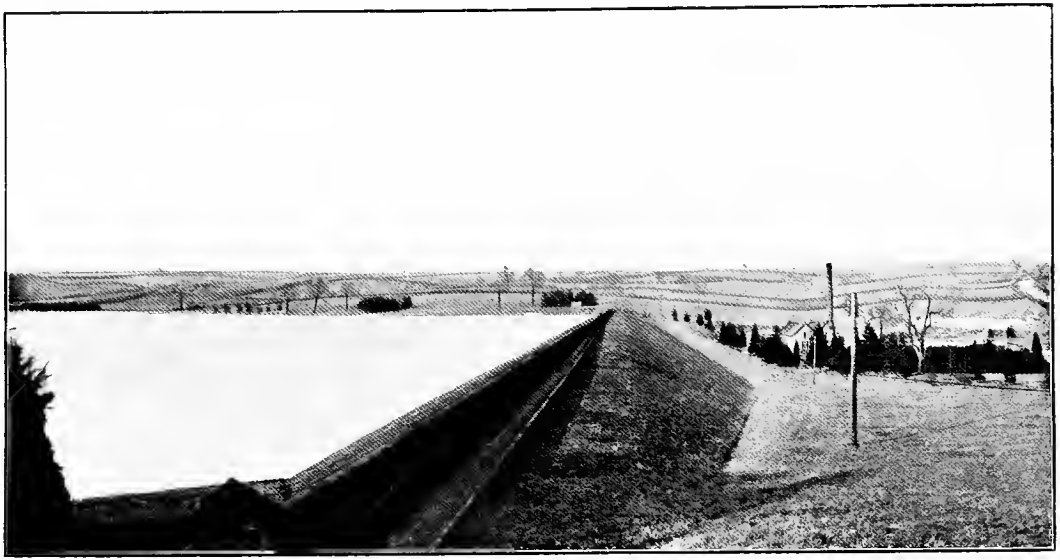
The obvious thing is not to pin ourselves to any fly until we have proved its merits. The flies given above have all placed me under obligation. To their number I should add the alder, very good for later in the year, and a white bustard for evening work in midsummer ; the black gnat for day work in hot dry weather

when there is little breeze and scarce a ripple; claret and mallard for late spring; and a butcher. In the order of merit, starting off with a Greenwell, I should place the butcher about fourth on the list. To show that there is something to be said of flies doing well in some places and not in others, the case of the woodcock and green may be mentioned. This fly is Mr. Hamish Stuart's favourite. He says he is never without it. I tried it a whole season—it was rarely absent from my cast, and I do not remember once raising a fish to it.

Certain broad conclusions may now be set out. On a thin calm water use a small fly sombre in tint; on a big blustering water use a fly of sea-trout size, or a number 12 limerick, and let it have a big body and plenty of silver or gilt binding. In the morning use your larger and bolder flies; as the sun gets above you, change them for something smaller and darker; and as evening approaches go back to the flies of the morning. When the sun has gone down and the flush of twilight is changing into a pearly grey, change your cast for the stoutest you have, and put on a big bold fly with plenty of body, so that it will make a commotion when it falls on the water and will cause a little furrow when you work it to the side.

Some anglers are very particular what fly

they put on at night. As I believe trout to be colour blind in the dark, as human beings are, I do not think the colour matters in the slightest. All that they see is a dark shape moving through the water. Therefore, assist them by letting it be large enough to catch their eye. There is little need to make long casts, as the fish are often quite close to the side, and it is not at all uncommon for an angler working his flies ten yards out to hear a mighty splash at his very feet from some hoary veteran who has been feeding only a foot or two from the bank. Short casts and plenty of them, a stout gut and a bulky fly, are the avenues to success in night-fishing for trout.



RAVENSTHORPE RESERVOIR, NEAR NORTHAMPTON

CHAPTER V

MORE ABOUT FLY-FISHING

And now it is time we went out together and saw what trout-fishing on some typical reservoirs is really like. We are bound to-day for a reservoir which has been made by damming up a little moorland trout stream, by the simple process of throwing a wall of masonry across the valley. The lake covers an area of sixty or seventy acres, and the dam, forty feet high, affords a fine spectacle in winter when the overflow of the flood water rushes over it in a boiling cascade. It is set in a wild and lonely part of the moors. On one side is a plantation, and through the dark greenery we may catch a glimpse of the white gables of the keeper's cottage, and above the trees the smoke of his kitchen fire curls upward in the morning sunlight. Looking up the glen we see the shooting box of the lord of the manor. Away in the distance the view is bounded by the fells, across whose heathery slopes sunshine and shadow race alternately. We are less than ten miles from a manufacturing town, but the beauty and

the solitude and the keen sharp mountain air seem to belong to the Highlands of Scotland rather than to an English industrial county.

It so happens that this is one of the reservoirs on which boating is allowed. We make our way to the landing-stage, and there the boat, big and flat bottomed, awaits us. There is no use for light and finicky craft on waters such as this, for gusts come down the glen and lash the lake into a fury, and it would be no joke to be overturned in thirty or forty feet of water. But there is no sign of any such danger this morning. The sun shines from a sky which holds nothing worse for us than light fleecy clouds, and the gentle breeze does nothing more than stir the surface into a curly ripple which promises well for sport. The wind is blowing up-stream, that is, from the dam to the head of the lake, and we decide to go to the deeper water and then fish it to the shallower end. One of us takes the oars, and the other lets out a minnow on a spinning trace, and soon it is trailing far behind. A stroke or two of the oars and we are in deep water. As a rule it is not much use fishing the fly here. Except in rare cases, which will be mentioned later, the trout are taken best from the shallows. Folk of a scientific mind tell us there is a reason for this state of affairs. Below a certain depth,

where the light does not penetrate, there is no vegetation and no life, and in consequence it is useless to look for fish there. In proof of this theory they will quote to you the case of Loch Leven and other natural sheets of water, where the shallows always yield the best fish. Therefore, we gently row to the foot of the lake, and give the minnow a chance on our journey. There is just the possibility that some roving trout, cruising in the deeps for anything he may chance to meet, may be attracted by the glitter of our bait, and if he take it, and we are careful, we may have the pleasure of opening the day with a record fish.

But nothing of the sort happens, and soon we are touching the solid wall which holds back the water from the valley. We can look over it and think what would happen if the force of water were to push the dam outwards! Not for long does such a thought engage us, for we take in the minnow rod and pick up the lighter weapons all ready mounted with flies. This is a well-stocked water, and the trout are free-risers, so each rod is made up with a cast of three—a March-brown, a Greenwell's glory, and a mallard and claret. We put the boat broadside on, and let her drift, giving her a stroke or two to send her to the side opposite that up which we came. The bottom is sand

and gravel, with patches of vegetation, and trees come down to the very edge, and from their branches many a dainty meal must have fallen to the waiting fish below. This is a good "lie" for trout, and hope is strong within us. One of us stands in the stern and the other in the bows, and we begin by casting out and then working our flies to a point where one rod meets the other. At the very first cast one of us raises a fish, but is too slow in striking, and beyond a swirl and a flash of yellow side in the peaty coloured water there is no result. A second cast is tried, for in reservoir fishing you may abandon the theory that a "miss" will put a rising fish down. Cast over him again and he will come. In the same way, if you are casting before you, and a fish rises either to right or left, make a cast right in the centre of the ring, and the odds on the fish still being there and taking your fly are all in your favour. Remember reservoir trout are not soon frightened.

So we repeat the cast, and, true to our theory, the fish is at it a second time, and now we have him. He makes for the deep water, and then heads back for the boat, and we have all our work cut out to keep him from crossing beneath us, but we keep him out, and soon he is coming in, and the first fish of the day is within sight

of the net. Then the unexpected happens. We do not lose him, for we are on a water where fish are plentiful, and instead of playing one fish we are holding two. A second trout has seized one of the dragging flies within a couple of feet of our fighting fish, and both of us are now in request to get them into the boat. The net is slipped beneath the first, but instead of lifting it into the boat and putting a strain on the second it might not stand, one of us leans over, grips the trout as it lays in the net, takes out the hook, and then the net is ready for its mate. By this simple expedient, the best I know for netting two trout from a boat when they are both on one cast, we have the satisfaction of seeing a brace of handsome trout lying at the bottom of our creel. They are each about one pound and may be taken as an earnest of what the day will yield.

We fish three hours, and between us we have nineteen trout in hand, and we have returned one or two of smaller size. Our biggest turns 2 lbs., several are well over 1 lb., and none are under half that weight. We have drifted down to the top of the lake, and it may be noticed that the best sport of all was had in the shallows. The stream comes in through a sort of sandy delta, and between it and the edge of the lake is a weed-bed, where the water is no-

where more than two feet deep. The place is alive with fish, and if it were not that we have no desire to create a record or abuse the generosity of our host, we could half fill the boat. So we row to the dam again, and still again, content with the odd fish which come to us there, and looking rather longingly on the shallows, which seem aboil with fish.

By now there has been a change in the weather. The sun has gone in, a mist is rolling down the mountain sides towards the lake, and a drizzling rain begins to fall. We land, find the shelter of a clump of trees, and take our lunch. The wind increases in violence, and our boat is rocked wildly by the waves which are driving to the shore. If it were safe we should like to be out now, to see whether the fish are still rising, but we think better of it and remain where we are. Soon the storm passes away, the sun comes out again, and though the lake is still rough it is not so wild as to render boating unsafe.

On our second venture sport is even better than before, and it becomes sheer slaughter. We make up our mind to stop at thirty, but after reaching the limit we have still three hours in hand, and they are full of thrills. We take at least another twenty, and once or twice we repeat the excitement of hooking and landing

two fish on one cast, and as we are rowing gently back to the landing-place we have the adventure of the day. The sun has sunk, the sky is coloured with a rosy flush, and the mountain sides grow dark and mysterious under the changing sky. The breeze sighs gently in the tree tops, and the surface of the lake is scarce broken by a single ripple. One of us is rowing, and the other makes an idle cast where the swirl of the boat leaves a bubbling wake behind us. On the instant his fly is taken, the rod bends double, and the line is pulled off the reel as nothing that day had made it. The next moment, twenty or thirty yards out, a monster fish leaps clean from the water. Good heavens, can it be possible the lake holds such a fish? We look at each other. "Ten pounds," says he with the rod. "Call it half, and its still a prize," is the reply of him who rows.

There is no time for argument. The man with the rod—and he knows best the strain of the fish and the danger of playing him from the boat—urges the other to take him ashore, that he may play him from a solid strand, and there the fun begins. Time after time the fish is reeled in, only to turn his tail to us and bolt again for the other side. Several times the end of the line on the reel is reached, and then

for an anxious moment we hold our breath and wonder what will happen. At last the end comes. The trout is within a yard or two of the shore. The net is in the water ready to hold him when he is guided in safety over it. But alas, that happy moment is never reached. All of a sudden the fish makes a leap in the air. The rodster, startled, bends back and jerks his hand. We hear a snap, the fish falls back, the line hangs loose, and as we reel it in we look at one another and think, what we lack the courage to put into words, that we have lost the trout of our lifetime.

Remember this is a reservoir, not a Highland loch or a private tarn in the Lake District. It is an artificial creation, it is owned by a corporation, it is the most populous county in the provinces, and though the fishing rights are not owned by the corporation, but by the squire on whose soil the lake was made, the conditions are in all other ways comparable with those of a hundred similar sheets of water. Some day, perhaps, the municipality may acquire the fishing, and then they may open to the public a paradise which at present is reserved for those who have the favour of the local squire.

This is a reservoir on which I have made many experiments both with May-fly and dry-fly. There is a slight hatch of May-fly in June

of each year, but the trout do not seem half as keen on it as they are in the famous dry-fly streams of the south. There is nothing like that scene of mad excitement which writers have pictured for us after days with the May-fly in Hampshire. My best successes were when the hatch was dying out, and stragglers were coming to the surface, and the fish perhaps realised that if they missed these remnants the chance would go for another solid year. On such days, fishing the May-fly a long way out on a thoroughly greased line and cast, I have had fair success, but never on such a scale as to fire my imagination and turn me into a May-fly enthusiast. On most reservoirs of my acquaintance there is a complete absence of May-fly, due, perhaps, to the circumstance that artificial reservoirs fall in depth in the summer, as the water is drawn off, and as a consequence the larvæ of this insect perish in the light and air.

The dry-fly is in different case altogether. It may be tried any day when the lake is dead calm. On a typical summer day there will be a good breeze in the forenoon. It may die away at midday, revive in the afternoon, and then fall off altogether as evening approaches. The surface of the water is unbroken by a single wavelet, but it is marked everywhere by the rings made by rising trout. To fish the ordin-

ary wet-fly is useless. You have either to wait and hope for a breeze, in which event you may end the day with an hour's exciting sport, or you have to fish your fly dry. In that case put on the finest cast you have, arm it with only one fly, grease line and cast to make sure they will float, then kneel down and cast well out. If your fly cocks well, let it stay a second or two where it falls—for you have to remember there is no current either to carry it to a feeding fish, or to hide the nakedness of your gut cast. If nothing happens give it a slight twitch by raising your rod top towards you. This will pull the fly a few inches in, and will cause just sufficient commotion to arrest the attention of a wandering trout. He may or may not take it, but that cannot be helped. You can do nothing more to entice him.

There is a certain amount of monotony about dry fly-fishing on a lake which, to the writer at any rate, deprives it of its charm. Others like it and do well with it, and one angler writes me saying that he sometimes finds it most deadly in a calm. He uses two flies on the same cast, one oiled ready for use dry, and the other to be used wet. When reservoir fish do take the dry fly, as a rule they are big and lusty fellows and put up a good fight, but it has always appeared to me

that the dry fly, standing out as it does so motionless and so boldly, is much more likely to be taken for an artificial than the same fly would be if sunk below the surface and soddened by the water. If this little book leads to a dry-fly cult on lakes and reservoirs it will certainly be the means of adding to our knowlege.

Another class of reservoir is that which is altogether artificial. That is to say, it is used solely for storage purposes. Instead of allowing water to run to waste from the big reservoir when it is full, the surplus is carried away by a pipe and turned into a reservoir which has been made by digging a pit and covering sides and bottom with concrete. The supply comes in at one end from a pipe, and is drawn off at the other end as required, by another pipe which goes direct to the town. Although such a sheet of water does not look promising, it often yields splendid sport. As a rule trout do not grow very big in it, and a fish of over a pound is a monster, but if the lake is well stocked the trout are sure to be good risers. There is no gravelly shallow on which they may grub about in search of food, no welcome stream carries down a store of insect life in its refreshing current. Yet such a place is a mass of life, as anyone may know who chances to see the water

drawn off rapidly and the bottom exposed. The fish are well fed, and though the struggle for existence seems all against the breeding of a heavy type, there are hundreds of half-pounders which never look coldly on a well-thrown fly.

A sheet of water like this is best fished by following the wind. It is useless to work the calm and sheltered portions. Trout follow the wind, to feed on anything which drifts to the side where the wind is blowing, and there, in the "jabble," as Mr. Hamish Stuart calls it, you may find trout and you may catch them. I don't know why, but such a water demands smaller flies than a reservoir more natural in the circumstances of its shape and configuration. As evening draws near one of the best places will be near the inlet pipe. The rush of water makes a commotion, probably freshens up and aerates the main body which has stood all day in the sunlight, and the fish are attracted by its coolness and its movement. On one reservoir it was my practice to stand with one foot on the pipe, and many a score of good fish came to my fly, and from my fly to my basket, at this favourite corner. Still, this is evidently not a rule to be taken as general, for on another reservoir of my acquaintance, which I have fished scores of times, and where I always make

a cast or two at the inlet, I have never yet had a single rise.

From the point of view of casting, some reservoirs present many difficulties to the angler. On a river, particularly if you are wading, you are assured of plenty of elbow-room to get out your line. But imagine yourself on a reservoir, on a pathway not more than ten or twelve feet wide, and immediately behind you a formidable wall. In such a case casting becomes a work of art. The ordinary cast, with its long backward sweep, is clearly impossible. Even if your line cleared the wall, you would be lucky if your rod did not catch it and come to pieces. To go away would be no improvement, as the fish are rising here right in front. You have got to fish here, and to do it with anything like success you must learn a new style of casting. I do not know what to call the cast I learned many years ago, but it is certainly an admirable cast for a man who stands on a narrow causeway, with fish in front of him and a wall behind. It consists in bringing the rod gradually back until the point is well over your right shoulder, when with a sudden flick the line is thrown out again without it even going behind you. It may be that casts made this way are not so long and are not so straight and clear as those made in the ordinary backward fashion,

but they have the merit that they prevent many a smash and the loss of scores of flies.

There is endless variety in fishing reservoirs. If you have access to only one water you see it under many conditions—now quiet and calm in the sunshine, now black and wild in a driving gale. In the early part of the season you fish it when it is bank full, and later you are there when it has fallen ten or even twenty feet, and you may walk scores of yards across its bed in the shallower parts. The conditions are rarely the same from an angling point of view, as the trout change their quarters as the level rises or falls. To-day you stand on the dam and catch fish in fifty feet of water. On your next visit you walk down the side, across the bed, and fish a pool where the drought has driven all the trout to take advantage of what little water still remains. And if you keep your eyes open you are always adding to your store of knowledge.

If you have access to more waters than one you see them in a variety of different settings. This week you cycle half a dozen miles out of town and fish a little reservoir almost on the fringe of the suburbs. You feel you are within the influence of the city, for as you look down the valley the pall of smoke from below hangs over it like a curtain of crape. A week later

you have gone twenty miles farther afield, and the last outpost of industrialism has been left behind. Before you is a reservoir, almost like a mountain tarn, half a mile from a road, rarely beheld by tripper or tourist, revealing its glory to few save the solitary shepherd, who sees it shimmering below as he strides from crag to crag in search of his wandering charges. All around it are the hills—now green and purple in the sun, now dark and drear as the clouds chase away the sunlight. Hardly a sound is heard. Afar off comes the rhythmic noise of the plash of water on the gravelly beach at the other side; anon the wind whistles as it circles round the hills and then sweeps upon the lake to break its bosom in a thousand creamy waves; and above all comes the plaintive call of a pee-wit, or the shriek of a gull as it circles in the air and then falls upon the water.

As I think of some of these reservoirs I have fished there come to me visions of flashing lake, of pebbly beach, of cloud-capped summits, of glorious effects of sunlight on mere and mountain, and of leaping trout at the end of a cast. For twenty years I have fished, and my line has been cast in nearly every county in England, in search of every variety of fish that swims in British waters, but some of the happiest recollections of my angling career belong to the days when I have

wandered round the edge of some inland reservoir fishing for trout with a fly rod in my hand. The day may have been rich in sport. The trout have come madly to the fly. The strong pure air of the moors has blown the pallor out of the cheek, and made the eye to sparkle and the blood to glow. As the sun sinks we load up the bag, and make friends with the keeper by the parting gift of a brace of fish. Then with a farewell glimpse of the lake, glowing red in the light of the blazing western sky, we turn our face down the moorland slope to where, as the darkness comes upon us, we see the far-off twinkle of the tavern's welcome light.

Or it may be that we determine to stay on a little longer and fish in the dark. It is July, and the rules give us fishing till eleven o'clock. One by one the brethren depart, the sunset glow fades out of the sky, and o'er the lake comes the sound of a distant clock as it chimes the hour of nine. While there was yet light we changed our cast, and we now have on a stout gut of not more than six or seven feet, with only one fly on it, and that a big-bodied creature like nothing that ever lived. For there is no delicacy about this style of fishing, and if the truth needs be told, there is even less of art or skill. It is simply luck and strength of

tackle—but it is good fun, with a touch of the eerie about it, and it certainly yields the biggest and the best fish we may ever hope to catch.

To begin with, we make for the shallows, either on the edge of a gravelly bottom, or near a weed patch. The fish are no longer in the deeps. Big fish and little fish, they have come to grub in the shallow waters for food. One scientist says they also come in to sleep, but I cannot accept that yarn. At this hour of the night the trout are very much awake indeed. They are rising all over the place, plop-popping everywhere, and occasionally you hear the gurgling movement which tells you a veteran has turned over on the top. Emboldened by the growing darkness, conscious that they are screened from observation, they will play and feed right to the very edge, in water so thin it hardly covers them up. All the angler has to do is to cast out amongst them, and he is almost sure of reward. Sometimes, in an hour of this kind of fishing, I have taken a dozen good trout.

The thing is simplicity itself. You cast out, make as big a splash as you like, and then work your fly in again. If you feel nothing you lift your line clear and throw again. But the chances are that you will feel something. Your fly is seen. A trout throws himself upon it. You

feel the drag, and strike on the instant. There is no need to play with him. Your cast should hold anything up to a little salmon, so you reel him in, disdaining the net, and beaching him at your feet. You lose a few fish by this method, it is true, as the resistance of the fish, combined with your own pull, will often drag the hook out of its hold, but this cannot be helped. If you go in for night fishing you must drop all sentiment and remember you have stayed behind solely to catch fish.

All the same, sentiment will try and creep in. The last vestige of twilight disappears. The sky is studded with brilliant stars. The lake glimmers in front of you. The silence is broken by the noise of leaping fish, and the hooting of an owl in the neighbouring wood. Bats circle round your head, and frogs leap o'er your feet. And ever and anon you wrestle with a trout, and draw him panting to the side. At eleven, which steals upon you suddenly by the sound of the nearest church clock, you pack up and come away —leaving the lake still a picture of beauty in the starlight, and the trout still leaping; but your bag is heavy and your heart is light. It is another rare experience to be added to the chapter of life.

WEST BALDWIN RESERVOIR, DOUGLAS, ISLE OF MAN

CHAPTER VI

WORM FISHING

THERE are many good anglers who consider it almost a sacrilege to tempt a trout with a common worm. As Charles Lamb said of Shakespeare, angling for trout is almost good enough to justify grace being said before you enter upon it. If you cannot catch trout with a fly, or at least with a minnow, forbear to desecrate the sport by the use of worms. That is their rule of life. I have met many fishermen who, having made a long journey to fish for trout, have returned without putting up their rod because they found the water unsuited for the fly, and they could not bring themselves to the use of any other lure. This is very nice, to be sure, but it isn't fishing. The business of angling is to catch fish, and though these purists may be satisfied that their conduct lifts them high above the common crowd of sportsmen, it is not sufficiently satisfying for those whose days at the waterside are only few, and whose desire it is to enjoy the

thrill and the pleasure of hooking and landing a basket of trout.

Within reason, trout fishing with the worm is quite legitimate. As I have endeavoured to show in a former chapter, the idea of angling is to deceive the fish by the offer of food, and as the worm is one of the staple dishes of trout there can surely be nothing improper or unorthodox in its use. Trout do feed largely on worms. Every angler must have seen them disgorging worms as they find themselves fast in the meshes of the net, and I remember once counting nearly a score thrown up by a trout well under a pound in weight. Indeed, it may almost be stated as a fact that taking the season right through there is no more tempting bait for trout than well-scoured worms. It is therefore a waste of time to argue against the theory, now put forward with much less force than formerly, that worm-fishing is unsportsmanlike.

All the same, the use of the worm has its limitations. To throw it in during a spate, on a thick cast, when the water is so cloudy with clay and mud that the trout has no chance of avoiding it, seems thoroughly unsportsmanlike. On the contrary, worm-fishing in a clear water, in the scorching days of the middle of the summer, requires every bit as much art, and

involves as much delicacy and finesse in the manipulation of the line, as fly-fishing. Canon Greenwell, the veteran northern cleric, whose name will always live in association with his famous fly, Greenwell's glory, once put it to the test with surprising results, on a Northumberland stream. "It was a blazing hot day," he says, "in the beginning of July, the water dead low, the back fin of the trout often showing, in the ripple below a stone, out of the water. I killed 178 trout, and had to leave about two miles of the best water unfished, all my tackle having been spent. I well remember the last hook of the three of my Stewart tackle hanging by a thread, and serving in that condition to land a trout, and then when another took the worm the fish going away with my last chance." So much impressed was the Canon with his day's outing, and others nearly as good before it, that he was led to speak of the art of upstream worm-fishing in clear water as "the most effective, as it is the most skilful of all branches of trout-fishing." If the reader desires to pursue this subject further he is recommended to read *The Art of Worm-fishing*, by Alexander Mackie, M.A., published by Messrs. A. & C. Black at eighteenpence.

If worm-fishing is allowable in streams it is obviously not out of place on reservoirs and

lakes. But even the worm should be used in a sportsmanlike way. On three reservoirs with which I am aquainted it is tolerated in a style distasteful to every right-thinking fisherman. A big hook is baited with a worm, on a stout cast, to which a heavy lead is attached as sinker. It is then thrown out and allowed to fall to the bed of the lake by its own weight. No float is used, and all that the angler is able to see is his line where it enters the water. He may sit beside it and smoke, or read, or even doze, till the worm is taken. If the trout mouths it he will hook himself by the mere action of biting; if he swallows it at a gulp the worm is taken down into his stomach. Then he moves away, the line is pulled off, the reel revolves, the noise arouses the angler—and he strikes, and willy-nilly the trout is hauled ashore. This seems to me the basest form of sport. There is no art in it, the angler needs no skill, he takes no part in hooking the fish, and very often the poor trout is so dreadfully mauled when landed that if he is under the size limit and returnable he is too badly damaged to be put back into the water. It is an outrage on so fine a fish as the trout to treat him so wretchedly.

The best way to get sport out of the use of the worm is by means of a float. Here the

angler does play a sportsman's part. He sees the float riding on the surface; he sees the gentle bob when a trout timidly touches the bait, or the sudden dive if the fish gulps it with decision and boldly runs away with it. He may move about and try every condition of water—here the open lake, where the boisterous breeze blows his float far out from the side, and yonder a quiet corner of slack water where a projecting bank diverts the wind. He has all the pleasure of the strike, and, if he be not quick enough, the mortification of seeing his float come quickly up again, a sure sign that the fish has got away and cleared the hook of its tempting tit-bit.

There are two ways of float fishing, and each produces good results. One is the Sheffield style. This involves the use of a roach rod, a fine cast, and the tiniest hook imaginable—or a pennell trace of two. The float is not much larger than a lucifer match. This method is best used in the shallows, where the water never runs to more than six or seven feet deep. The worm is allowed to lie on the bottom. The slightest nibble disturbs the float, and the strike has to be instantaneous if the fish is to be hooked. There is plenty of sport in this style of fishing, and artisan anglers who have never mastered fly-fishing become so proficient

at this that they make tremendous catches on well-stocked waters. Very often the fish thus caught are real monsters, as big fish go roaming about in these thin waters in search of something to eat, and a fine fat worm lying on the sand and gravel is too attractive to be left alone.

Though not so deadly among the big fish, yet more successful in a general way, is another method of float fishing which has always appealed to the present writer. The drawback is that it requires a special outfit, for if the angler is going out with the fly rod and there turns out to be nothing doing, the fly rod cannot be made to serve for the method now to be described. Therefore, it means that the angler must take out two rods, or make up his mind in advance how he is going to fish, and take out the tackle required for his particular purpose. The rod necessary for this second form of float fishing is a minnow spinning rod, stiff in the make, and not more than ten feet long. It should be mounted with porcelain rings. A Nottingham wood reel is used, or, better still, a Coxon "aerial," with a fine undressed roach line. The cast should be about eight feet long, ending in Stewart three-hook tackle. Eyed-hooks seem to serve better than those wrapped to the gut. The distinctive feature is the float —which should be big, heavy, black, with a

white tip. An eight-inch barbel float, weighted with several wrappings of thin sheet lead at the foot, meets the case admirably.

The reader will already have an inkling of the idea. The heavy float, the undressed line, the "aerial" reel, and the porcelain rings—all point to long casting, very much like spinning. The angler takes his stand on the shore, preferably at a spot where the wind blows from behind. He reels up his line so that the weighted float hangs clear below the rod tip, and then with a left-handed throw he swings it out as far as he can. The line shoots through the rings, the float speeds through the air, and falls in the water twenty or thirty yards away. The wind gets behind it, and breeze and current carry it far out, the line being paid off the reel as the float is forced along. The worm, on its hooks, hangs suspended six or seven feet below the surface, but it is by no means still. The float rides on the waves, now up, now down, and of course the worm is being lifted up and down to correspond.

This is a most attractive method of fishing, full of a certain amount of excitement, for the angler never dare take his eye off his float, and he is often puzzled to tell whether a sudden dip is due to a bite or to a more than usually boisterous wave dashing his float and momen-

tarily submerging it. When a lot of line is out it is difficult to strike quick enough to ensure hooking the fish, and when hooked the trout has a good chance for his life, as the length of line and the heavy float make it especially difficult to get command of a fish so far away.

This method of float fishing may be followed in all weathers. I have rigged it up and caught trout in a dead calm. The float has been cast twenty yards out, and there it has stood motionless, till a sudden dive has told the tale of a feeding fish. In wild, gusty weather, it is particularly deadly; and if used near an inlet, be it stream or pipe, it rarely fails to bring trout to the basket. If the fish are struck rapidly they are sure to be hooked well forward in the mouth, and thus undersized ones may be returned little the worse for their adventure. At the same time it must be admitted that this heavy float fishing is best adapted to blustery weather. On a calm day, when by the nature of the tackle the worm hangs suspended in the clear water, absolutely motionless, it is not much of a temptation. When there is a strong breeze blowing this method of fishing will take trout right close in, among the foam and drift, when the wave is dashing the float against the side.

Many a poor day with the fly, due to calm and bright weather conditions, has ended with

a satisfactory basket by the use of the float. One reservoir lent itself especially to this sort of fishing. It was fed by a fair-sized beck, as northern streams are called. Just where the beck entered the lake it was crossed by a bridge, from which wall and parapet were missing. Beneath the bridge the stream was not more than two feet deep, but it widened and deepened rapidly, and ten yards away it was ten feet deep. Long experience had taught me what to expect here every night. As soon as dusk began to creep on the big trout left the lake and came to where it was joined by the stream. They loved its cooler waters, and they knew the little tit-bits of food which came floating down with the current. Sometimes they ventured right up to the bridge, but more often than not they waited a few yards below, and it was easy to picture them standing there in rows, looking up for anything that floated down.

A favourite place for the angler was a seat on the edge of the bridge, with his legs hanging over the water. Many and many a time I tried there with a fly, but it was no use until quite dark. The spot was sheltered, there rarely was a ripple, and for that and possibly other reasons it seemed hopeless to tempt fish with a fly, so long as there was even a vestige of daylight. But they came madly to the worm. A small

cast would be made of a few yards, and as the current carried the float down you would pay out just sufficient line to keep it tight and taut. Almost invariably the float would glide beneath the water at the same spot, and we came to marking it on the banks and making small bets how many times in twenty casts the float would pass untouched. When it grew darker, and we were no longer able to see the float, we detected bites by the tug of the fish. To those who tried it there was always something fascinating in the idea of sitting on this bridge long after twilight had faded out of the sky and having the rod half pulled out of your hand by the dashing bite of a two-pound trout. One night there I had thirteen fish totalling 16 lb.

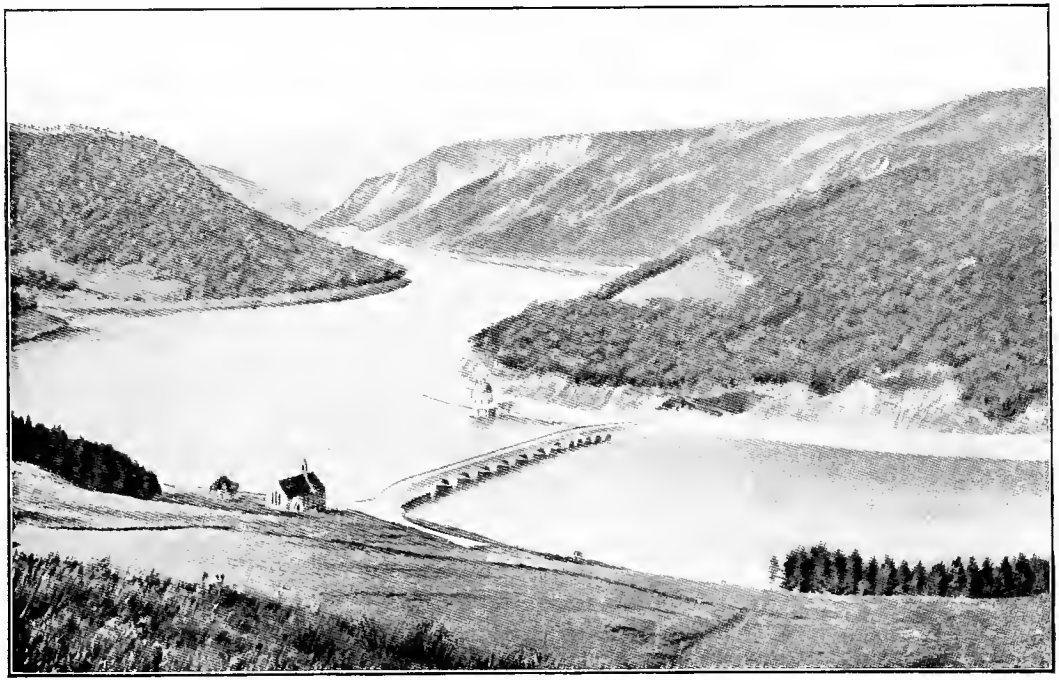
In the Lake District there is a popular method of catching char, and though the writer has not applied it to trout-fishing, it has been applied by others with much success. It consists in lightly casting a baited worm in the shallow edges of lakes and reservoirs, and then drawing it toward the bank in jerky movements. A fly-line and a fly-cast may be used—in fact, it is fly-fishing with a worm, if the phrase is allowed. At times big catches of char are made in this way, and those who have followed out the idea in regard to trout speak well of its sporting possibilities.

In the matter of worms, brandlings should be avoided like the plague. The odour they give off is most offensive, and they are too delicate to stand the rough usage which will fall to their lot if they have to be thrown out for a long distance on heavy float tackle. The marsh-worm is good, but small lobs, or flat tails, cannot be beaten. They need to be well scoured in moss, and despite the present fad for carrying worms in small bags it is hard to believe that anything can surpass a square tin canister, in whose lid a few holes have been punched for letting in the air.

Despite the suggestion recently made by Dr. Francis Ward, in the interesting book in which he gives the results of his observations of the feeding habits of fish, I do not think a dead worm, or even a dying one, can be anything like so attractive a bait for a trout as a worm which shows some life and animation on the hook. Some day the point may be settled by two anglers fishing together, one with dead worms, and the other with live worms, and then we may find out what the trout really thinks about the choice he is offered. Till that test is made I recommend worms whose liveliness cannot be questioned.

To those who object to worm-fishing, or to the use of bait in any form, there are two ways

out of the difficulty. If you have only one reservoir you may limit bait fishing to a given period, say from July to the end of August, so that the fly-fisher has the spring and autumn to himself; or you may restrict bait to a clearly defined part of the lake and make its use unlawful elsewhere. If you have two reservoirs the thing settles itself quite easily. Reserve one sheet of water solely to the use of the fly, and allow anything in the other. Then everybody is satisfied. Only one restriction should be added. Maggots might be prohibited—not because, as a bait, they are any more objectionable than worms, but because their use is a standing temptation to some anglers to throw them in as ground bait. Not only is this against the spirit of trout-fishing, but it is hardly a pleasant reflection to those in the city who drink the water thus polluted. In every community there will be a few who object to the town's water supply being used for angling at all, and it is well to see that they have no cause for vexatious criticism.



CABANCOCH

(*By the courtesy of* Mr. J. ROBERTS, *Chemist, Rhayader*)

CHAPTER VII

SPINNING THE MINNOW

SPINNING the minnow, if done with skill, is a deadly method of catching trout, and it has the advantage that it often leads to the capture not only of good sporting fish, but of those big cannibal fellows which rarely rise to the fly, and are only occasionally tempted by a worm. Some purists object to it on the ground that it spoils the trout. They argue that a great number of fish are pricked by the hooks without being caught, and that the lesson they learn from contact with the bait is calculated to put them down and make them reluctant ever again to look at an angler's lure. They even bring forward a second objection—namely, that under-sized fish are sometimes taken on the minnow, and if these are badly hooked they have suffered too much damage to be returned to the water with any advantage to the fishery. As against these arguments I reply that both of them are exaggerated, that the harm done, if any, is so small as not to be taken into account, and that even if the very worst be

admitted, the advantage of ridding trout waters of cannibal fish entitles the minnow to be regarded as a thoroughly sporting method of angling.

Let us first of all explain the plan usually followed by the present writer, which he can recommend as being thoroughly suited for reservoir work. The rod should be short and stiff—not more than ten feet, while nine feet is an even more suitable length. The line should be of undressed silk, stouter than roach line, as you may be called upon to deal with fish of five or six pounds weight. To ensure it running smoothly, have your rod mounted with porcelain rings. These are among the best inventions of recent years, and no rod is completely equipped for long and accurate casting without them. A score of different reels may be recommended, but personally I have never seen anything I like better than the Coxon "Aerial." This reel is so light and is mounted so delicately, that if you lay it flat on the palm of your hand and blow at the handles, your breath will cause it to revolve. Of course, it is fitted with optional check action, and you disengage this by a button on the side opposite the handles. To a novice the reel has a disadvantage, inasmuch as it shows a tendency to overrun, and the only brake action that may

be applied is by the angler's fingers. All the same, the art of using the reel is soon acquired.

A good plan is to go out into a field, with rod completely equipped and a minnow properly mounted on a gut trace, and then make a series of short casts. Open a newspaper out, spread it on the ground, and at ten yards distance try to place the minnow on the paper. After making yourself perfect at this range, increase the distance to fifteen yards, then to twenty, and so on, until you have complete confidence in yourself. In casting, reel the line in until the minnow hangs seven or eight feet from the top of the rod. Then stand sideway to the open newspaper—which may be taken to represent the water—swing the minnow backward, and as the rod comes to the front take the finger off the unchecked reel. By its own weight the bait will speed through the air until the momentum is exhausted. Then it will fall lightly on the ground—perhaps on the paper, perhaps not. The speed of the bait may easily be regulated by the angler if he has his finger on the outer rim of the reel, and when it has gone far enough he may increase the pressure and thus brake the reel till it comes to a stop, when the bait descends to the level. If the finger is pressed on the reel with excessive force the reel will stop suddenly, and the jerk may

snap your trace, or at any rate make it fly wide of the desired mark. On the other hand, if not controlled sufficiently, the speed of the reel will be greater than that of the bait, and in this case the line will be wound backwards on to the drum. This is what is meant by overrunning. It usually leads to a horrible tangle, and the way a line can mix itself up during the overrunning process is a marvel of diabolical ingenuity. On the whole, spinning with a free running reel is certainly not child's play, and I have met many good fly-casters who never acquired the art of using the minnow in this way.

There is no need for the gut trace to be more than six or seven feet long. The thickness depends altogether upon the size of the trout you expect to meet. As a rule, you will move heavy fish, so that strong tackle is absolutely necessary, but all the same it should be as fine as may be compatible with safety. There is a great difference between spinning in a river and in a reservoir. In a river you usually wait till there has been a spate, and then you fish it with spinning tackle when it is fining down and has assumed that welcome hue of amber known as a "minnow water." In such conditions the trace is more or less masked by the colour of the stream. In a reservoir you have not this

friendly aid to deception. The water is always clear, and nothing could be more fatal than a thick ugly cast. For the same reason, use as few swivels as possible. I generally find three sufficient—one to connect the trace to the bait, one between the trace and the reel-line, and the third midway in the trace itself. Swivels are necessary to allow the bait to spin freely, without causing your reel-line to turn with it. If the swivels do not work properly the bait loses its attractive appearance, and your reel-line will develop a "kink."

Finally, as to the minnow. Purists use nothing but the real thing—minnows either freshly caught, or pickled in formalin. I have no prejudice in this matter, but I deny absolutely that the real minnow is a better bait than a good artificial. I have used both kinds for many years, and given them careful test, and noted the results, and I lay it down as my experience that an artificial bait is quite as good as the real fish. Only in one particular do I think the natural has a pull over the artificial. Through some cause or other the bait may cease to spin —it may be for only a moment. Now if the bait is a real fish no very great mischief will be done, as it is still a minnow and cannot be anything else; but if it is an artificial, the moment it ceases to revolve it looks like what it is—a

bit of coloured metal! All the same, and in spite of this little superiority, I plump for artificials. Natural baits are not always easy to obtain, they are troublesome to carry about in a pickle bottle, and they have the further disadvantage that not only do they come to pieces through frequent casting, but if they are touched by a trout they are so badly mauled that they must be at once replaced. If natural baits are preferred, a "Chapman" spinner will be very hard to beat.

There is such a choice of artificials that I hesitate to make a selection. There are two kinds which have served me in very good stead, and I never wish for any others. One is a plain silver devon, without painting, spots, stripes, or even eyes. For use on a wild blustery day, in a broken water, this bait met all my requirements. It has the advantage of being fairly heavy, so that no leads are required to get it out. My other favourite is a silver phantom, with the name "Brown" stamped on the flange. It is made of soleskin, is very light, and yet tough, and it will stand a great amount of wear and tear before it has to be replaced by another. Of course a lead has to be used, but if this is pinched on the trace three or four feet above the bait it will not be in the way, and apparently it does not alarm the fish to any great extent.

Once the art of casting is acquired minnow-spinning does not present any difficulty. It may be followed all the season through. In calm weather, if the fish are not showing, the bait should be allowed to sink very deep, and then, as it is reeled in, you should give the rod a jerk every foot or two to make the minnow appear as though it were darting through the water. In the deeps really big fish are caught by this method. Sometimes you have the excitement of seeing the fish follow the bait. The whole process is plainly visible in the clear water. The trout follows a foot or so behind. If he looks up and sees the angler he will turn and descend like a flash, but ten to one he is so interested in the bait he has no eyes for anything else. If at this moment your excitement overcomes you and you cease to reel in, all is lost. The bait ceases to revolve, it begins to settle towards the bottom, and the fish will leave it in disgust. Nor should you, at such a moment, accelerate its speed. Keep on reeling and jerking, in a perfectly natural manner, and you may have the satisfaction of seeing the trout make a plunge and literally hook himself on to the bait at the very moment you were about to lift it out of the water.

On a still calm evening, when the fish are rising "all over the place," and there is no

ripple, and it is absurd to think of casting a fly, a light minnow flung a long way out and then drawn in quietly is almost certain to be taken. One such experience stands out in my mind. A private reservoir had been made in a country squire's park. He had stocked it with rainbows. One afternoon, on a little Wickham, I took over thirty fish in an hour and a half—not one of them under ½ lb. I keep that Wickham yet—or what is left of it—in affectionate remembrance of its powers. Then a calm fell on the water, the ripple died away, and we sat and smoked and longed for the return of the breeze. The keeper came along, and in a casual manner mentioned that there was no objection to the use of the minnow. That was enough. My fly-rod had to serve, as it was the only one I had taken, but my tackle book was never without a brace of artificials, and one was soon rigged up. Then, casting overhand, as though with a fly, fishing light and without any lead, I had the time of my life. In little more than half an hour I had a row of fourteen trout on the bank, several of them over a pound in weight. As an instance of the deadly effect of the minnow this experience may be hard to beat. Let me add that under ordinary circumstances I should never have kept such a catch, but the keeper was glad of them. He had been ordered to

get some trout for the larder at the Hall, and he saw the hand of fate in my appearance. Altogether the afternoon and the evening yielded me not far from fifty fish. It was one of the red-letter days of my angling life.

If I have a preference for the use of the minnow it is on wild and stormy days, when the sky is overcast, when the wind blows like a gale, and the water is broken with rolling waves. Although we may rarely see them, it appears to me that trout under these conditions are often lying very near the surface of the water—perhaps in readiness for the flies, which their instinct teaches them to expect will be blown upon the lake. On these occasions, fishing heavy and casting far out, I have done great execution with the minnow. I do not think it is necessary to fish deep. At any rate I have taken trout when I have been spinning so near the top that I have sometimes seen the line as I have actually pulled it out of the water in the little trough between one wave and another. On such a day my favourite stand is at the lower end of the reservoir, where the wind drives the waves to break in creamy foam either upon the beach or on the sloping side of a dam. One such place comes to the mind. When the wind was from the

east it blew right into a corner, where a big concrete-faced bank made an angle. Into this angle, if the wind was like a gale, the water splashed up the bank, and then, as it fell, broke into a foamy smother. It is generally a sure place for trout. Flies are blown into it, and sometimes, if you look carefully, you will see the black nose of a trout breaking the swirling white. In the case of the reservoir I am referring to, I never failed to take a fish or two under these conditions, and I remember once, going there as soon as I reached the water side, I took three trout on my first three consecutive casts, all of them being hooked and played within a foot or two of the side, and being in my creel within the space of about ten minutes. Those who argue that the minnow puts fish down may work out the inwardness of this experience.

On waters where a boat is allowed spinning becomes very deadly. On a windy day you may nearly always be sure of a "run." Perhaps the best plan is to row pretty near the side, cast right inshore, and then reel in again. Many times trout are taken so close to the boat that they must surely have seen it, but they were so determined to "take" that they snapped before the minnow could be lifted away from them. In a boat, with a free-running line and

reel, the angler may explore every inch of the water, and, though the work is tiring, it brings its reward very often in the shape of trout which under no circumstances could be persuaded to take a fly.

There is another method of using the minnow from a boat known as trolling. Let it be granted that this is not a particularly high form of sport, inasmuch as little art or knowledge is brought into play; it nevertheless has its place in the scheme of angling. For one thing it is very restful, after a day's hard casting, to get into a boat and be gently rowed over the surface of a lake when the sun is going down and the hills reflect the glow of crimson in the west. You are tired of spinning, and you would like to end the day with a really big fish. No better way has yet been devised than trolling. You put your rod out over the side, pay out line till your bait is spinning behind you at a distance of thirty or forty yards, and just sit still and smoke and await developments. All of a sudden the rod bends backward, the line flies off the reel, and you are "into" a good fish. Remember the very biggest trout come to the minnow used this way and at this time of day—after sundown, and on through the twilight till the last vestige of day has faded out of the sky and the stars

begin to shine, when all the noises of the day are hushed, and you hear little beyond the lap of the water against the side of the boat. In the tarns of the Lake District trout of enormous size are taken by this method, cannibals better out of the water than in, and every reservoir where a boat is permitted may be improved by the use in moderation of this style of minnow-fishing. If the water is heavily stocked no harm will be done at all, and every flesh-eating trout removed is an advantage to the fishery.

There are objections to the use of the minnow, and it may be well to look at them here. The first proposition is that spinning has the effect of putting trout down. The only meaning of this phrase is that trout, seeing the minnow pass them, are frightened at it and seek refuge by disappearing below. That, of course, involves the admission that the minnow is so clumsily presented that the trout realise its artificial character, and become aware that an attempt is being made upon their life and liberty. The answer to that, surely, is that the spinning bait is presented to them as a *natural fish*, and if it looks so unnatural as to frighten the trout then the fault rests with the angler. His method is bad and should be corrected. If he presents it as a natural fish,

delicately, accurately, with little splash or commotion, a trout may take it, and the surest proof that it does not put fish down is found in the fact that they are so deceived by it that they actually try to eat it! To take three consecutive trout on the minnow, in three consecutive casts, all within the space of ten minutes, is not half a bad argument against the theory that spinning frightens all the trout.

Supposing a fish is pricked and gets away? This happens in every form of fishing. I am ready to guarantee, in pike-fishing, that few of us land more than 60 per cent of our runs, but the pike are not put down. They come a second and even a third time, and all of us have caught pike with their jaws more or less armed with our own and other people's lost tackle. Pike are not trout of course, and nobody would argue that trout have any share of the insensate savagery of pike, but I do seriously argue that they are not nearly so frightened of our lures as we imagine. I have seen a trout miss my spinner and snap again, which showed that he had no idea of fear, and more than once I have cast over a trout and aggravated him into taking at last. The whole thing, it seems to me, depends upon what are the emotions awakened within a trout on escaping from a hook. Does he realise it was

a hook—or even that it was an instrument of capture? Is he not more likely to feel angry at the thought that an insignificant-looking fly or minnow stung him so severely, and to vow vengeance upon the next he sees! Anyway, be that as it may, after twenty years thorough test of minnow-spinning for trout I am convinced its possible harm has been much overrated. I would not allow it indiscriminately on any water, still less on a closed-in reservoir, but would limit it either to a fixed period of the year, or to a few hours in the evening, or to some part of the lake hard to fish with the fly and yet known to be a resort of big trout.

Much more is to be said for the charge that fish taken on the minnow, if undersized, are sometimes so badly damaged that it is not advisable to return them. While admitting this, and claiming that it sometimes applies to trout caught on fly and worm, I reply that the danger is very much reduced if spinning is only permitted in the evening. My experience, then, is that the small trout are so much engrossed in looking after grubs and flies that the minnow falls naturally to the big fish. In the daytime it is surprising what small trout will take a spinning bait, and at night it is marvellous how it appeals to the big ones. And this fact opens up the question if spinning

is not actually necessary to keep down the cannibal fish. I know a Yorkshire reservoir where the fly-fishing, once of splendid quality, has dwindled down to a mere nothing. The fish are there. Two thousand two-year-olds are turned down every year, and countless ova, and not more than four and five hundred fish are captured each season. The cause is as plain as noonday to any angling expert. There are trout in that water as big as a man's leg. I once rescued a dead one which weighed over 7 lbs., and I have seen others leaping out of the water which could not have been an ounce under 10 lbs. These fish have developed cannibal instincts; they never rise to the fly. The worm-fisher rarely gets near them; they live on other trout, and the yearly turning in of two-year-olds and ova is an annual banquet —excellent as a philanthropic movement, no doubt, but wasteful and useless if viewed as an item in the management of a trout-water. There are only two ways to remedy this state of affairs. One is to net the water and take out as many as possible of these monsters; failing this—and the depth of the lake is an obstacle—the use of the minnow should be allowed in moderation.

Managers of trout waters might ponder over this point. It is made in the light of practical

experience. I was called in once by a Lancashire water committee who had undergone a similar experience, and who found their revenue falling off because anglers were no longer taking out tickets as a protest against the deterioration of the fishery. Trout had been turned down on a lavish scale, and after a few years the sport dwindled down to a mere nothing. Fly-fishing only was permitted. There was an arm, or bay, which could be netted, and I suggested this should be done. On a calm summer evening, when it might be expected that big fish would be exploring its weedy shallows, and probably chasing the little ones through the lanes beneath the water lily pads, we thoroughly netted this end, with the result that we took twenty trout over 3 lbs. each, and four of them even turned 5 lbs. each. Their lanky sides and ugly heads supplied ample proof that they were flesh eaters. To continue this good work, minnow-spinning was permitted for two months, and during that time ninety trout were caught of 2 lbs. and upwards. All under 2 lbs. had to be returned. Next season the minnow was discontinued, and the fly-fishers had the best time they had enjoyed for five or six years.

In other words, the fishery was reclaimed by the simple expedient of ridding it of cannibal

trout. These big fish, once they have lost a taste for the fly, rarely come to the surface. If they do, it is perhaps in pursuit of a smaller fish, or to enjoy a leap out into the sunshine. They live almost entirely on trout. Fifty or sixty such creatures will in a year or two bring any good water to the verge of ruin. What are you going to do with them? If they cannot be netted they must be taken out by angling, and the only method suitable is spinning the minnow. The real practical good that I have seen accomplished by the judicious use of the minnow far outweighs any possible harm that may follow its adoption. Moreover, a water committee may always stop it, once they are assured most of the big fish have been taken, and they are supplied with proof that spinners are being content with trout under twelve or fourteen inches in length.

CHAPTER VIII

CONCLUSION

We seem now to have pretty well covered the theme of trout-fishing in reservoirs. The extent of the subject has been indicated, as shown by the number of schemes of public water supply which now contain trout and are thrown open for angling. The type of fish best suited for stocking has been dealt with, and, following upon a description of the equipment required an attempt has been made to deal with the three styles of angling—the fly, the worm, and the minnow.

Is there anything which has been omitted? Casting about we light on one or two points which may repay a little examination. What should be done with the flies when they have been thrown on the water? Under all circumstances they should be allowed to sink out of sight. In a light thin water with only a small ripple they may be permitted to sink quite deep. On the other hand, if the water is big and broken, they may be fished nearer the

surface. My view is that in placid water fish do not lie so near the top as they do when there is a fairly strong wave. After making the cast the rod is held motionless for a few seconds until the flies have sunk beneath the ripple, and then they are "worked." They are brought to the side in little jerks, made by the slightest movement of the tip of the rod. Is this way they look as if they were darting to the side, and assume a more or less natural character. To merely throw them in and bring them back in a regular movement is quite a hopeless waste of time.

Of great importance is the subject of striking. Thousands of fish are lost by faulty striking—generally, alas, too late. My own theory is that in fly-fishing, particularly on lake and reservoir, you really cannot strike too soon. I have heard it said that you should never strike till you feel the pull of the fish, and in support of this theory we are told of the success of blind anglers, who obviously have nothing but the tug to warn them of a rising fish. That is all very well, but what of the fish they never feel—the fish which rise to the fly, perhaps take it in their mouth, and reject it like a flash, without making the slightest pull on the line? The whole of this operation is unseen by the blind angler, and, in consequence, he fails to strike

and so misses the fish. The argument that the blind angler is successful because he trusts to the feel of a rise is incomplete. Had he his sight the probability is that he would catch twice as many if he were able to strike the moment he saw his fish.

The other day I put this to the test. I made up my mind never to strike till I felt the fish. I had countless rises, and knew instinctively my fly had been taken many a time, but I steeled myself against striking—till I felt a tug. The consequence was that I caught only two fish, whereas I ought to have had a bagful, for I was on a water where a score of good trout is an ordinary afternoon's catch. By waiting in this manner you put upon the fish the onus of hooking himself! When a trout takes a fly, the usual operation is that he comes up, opens his mouth, sucks it in, and then turns to go below. It is this turning down movement which we generally call the "rise," but in reality it isn't the rise, but the result of the rise, and at that moment the fly is in the mouth of the fish, if it is a real one, or it has been ejected if its deception has become apparent. Anyway, a strike at that moment is obviously too late.

The moment to strike is when you see the bulge made by the fish. If you have good eye-

sight you know where your flies have alighted, and as you draw them in you know to a few inches where they are likely to be. A rise a foot or two to the right or left leaves you unmoved. But a rise on the track of your cast should put you on the alert, and you should strike on the instant. Your flies may be four or five inches below the top of the lake. The upward rise of the fish is not perceptible, nor even his downward plunge, save by a bulging, wave-like movement. The moment you see this, strike, and you will be amazed at the extra number of fish you will catch. In other words, if you are fishing deep, the whole operation is out of sight. You may never see the fish. He may be so far below that his body may not actually break the surface. But he cannot help making a sort of bulge, or wave, or little upheaval, and the moment you see that is the moment for a strike. If you don't hook him no harm may be done, as the strike being from the wrist the flies will not be pulled more than a few inches from him, and there is the probability that he will follow and take firmer hold a second time.

On the whole, I have come to the conclusion that the strike can hardly be too soon, and particularly is this the case if you are fishing with large flies, when the unyielding steel must immediately convince the trout something is wrong.

To hook him before he has time to blow it out of his mouth you certainly cannot be too quick in striking. A rainbow trout sometimes behaves differently. My observation leads me to the conclusion that rainbows may take a fly *out* of the water. They come up, leap quite clear of the water, and then take the fly as they plunge down again. This idea may be criticised, but all the same I hold to it. The rainbow has ideas of his own, and this is one of them.

As to the management of reservoirs, as a rule this is in the hands of a corporation committee, and if they have no anglers on their body they generally select one or two season ticket holders to co-operate with them. If the water is leased outright to a club or syndicate the management will be in their hands, with the sole proviso that the corporation water committee may insist upon a right to approve or disapprove the rules adopted for the regulation of the fishery. Rules should be drawn out to cover all sorts of contingencies. The dates for the beginning and the ending of the season, the hours during which angling is to be permitted, should be made clear; and the provisions as to the use of fly only, or minnow, or worm and maggot, should be so definite as to prevent the possibility of misunderstanding. The length of takeable fish might be printed in blacker

type than the rest of the rules, and whatever limit is adopted—ten inches is the favourite—it should be made clear how the fish is to be measured. Some measure from the eye to the beginning of the tail, others from the snout to the end of the tail. As these rival methods of measuring mean a difference of two inches in a trout the importance of a uniform system is easily understood. The best plan, I think, is what is known as the "Fishing Gazette" scale. Under this scale a ten-inch trout weighs seven ounces and is a good takeable fish. The ten inches are measured from the tip of the snout to the end of the middle rays of the tail fin.

Ticket holders are always willing to show their catches to a keeper, but it is well to insert a clause in the rules empowering the keeper to demand a view of all fish taken away. Even better than this, there should be a book kept, and the keeper should record every angler's visit, and the number of fish he has in his creel at the end of the day's fishing, together with their weight, and the size and weight of any remarkable fish. By this means the owners or lessees of the fishery know what fish are being caught, and who amongst the ticket holders are making most use of their privileges. If weekly tickets are issued, as a rule they are limited to four days in the week, and those who

hold season tickets are not expected to average more than one visit a week—not necessarily one visit during each week, but if the season lasts thirty weeks they are not expected to put in more than about thirty days' fishing. Anglers who abuse their privileges—who are never away from the water's side—are sure to fall out of favour with the committee, and if they lose their ticket the fault is entirely their own.

To add to the comfort of fishermen, it is desirable that some sort of a shelter should be put up on the bankside. It serves as a cycle shed, a luncheon room, and a refuge in case of storm. A rough wooden erection may be put up very cheaply, and there can be no question as to its usefulness. Many a time, in my own case, such a refuge has meant all the difference between being caught in a storm and finishing the day with wet clothes, or sitting there in comfort watching the rain beating on the water till it has turned the surface into a hissing cauldron. If the owners object to the outlay the anglers may be trusted to find the money themselves.

Finally, though this book is not in any sense planned to exploit trout-fishing on commercial lines, it cannot be ignored that a successful fishery is worth money. I know one big fishery —comprising three or four lakes and a few miles of river, and a splendidly equipped hatchery

doing a big wholesale trade—where the profits run into three figures every year. Hundreds of visiting anglers take out tickets ranging up to five guineas for a season's trouting in all the waters under control. In another case, out of a single reservoir after paying all expenses and spending £60 a year on restocking, the owner makes £50 a year profit. He issues a score of season tickets at £1, and eight day tickets 2*s.* 6*d.* each, and on half-holidays and Saturdays these eight are always in demand.

The fact is that good fishing is always in request, and the demand is bound to increase as the years go on. Any owner of a sheet of clear water, either corporation or private individual, is wasting opportunities if that water is allowed to lie fallow. The thing to do is to stock it with trout and turn it into a fishery. By this means water-owners will make money, and they will give their fellow-men an opportunity of enjoying what is to-day, as it was even in Walton's turbulent times, the most fascinating sport any of us may ever hope to enjoy.

APPENDIX

LIST OF RESERVOIRS WITH FISHING

ALTHOUGH this may not be a complete list, it is as nearly complete as a postal canvass may aid the author's own knowledge, and it is certainly the first list ever made public showing the municipalities in Great Britain and Ireland which allow their reservoirs to be used for angling. Over 150 reservoirs are included, and from the replies received it is evident that public authorities outside the movement are watching it and have the subject under consideration. In those cases where the waters are leased to a local angling association the general rule is to grant permits to visitors, though sometimes only through an introduction by a member, but any angler wishing for a day on any such water after seeing it in this list is advised to apply to the address given in the last column.

Town.	Name of Reservoir.	Fish Contained.	Lure Allowed.	Day Ticket.	Season Ticket.	Where to Apply.
Barnsley . .	Ingbirchworth Midhope	Trout „	No restriction Fly only	2/6 Residents 5/– Non-residents	£1/1/0 for each reservoir	Water Office, Manor House, Barnsley
Barrow-in-Furness .	Harlock Pennington Poka	Trout „ „	Fly, worm, and minnow	1/– for all 3	10/– for all 3	Barrow Angling Association, Barrow-in-Furness
Batley . . .	Ramsden Riding Wovel Yateholme	Trout „ „	Fly, bait, and minnow	Leased to Batley Angling Club. Entrance, £1/1/0; subscription, £1/11/6. Day tickets for friends, 2/6.		Secy., Batley Angling Club
Belfast . .	Stonyford Leathemstown Woodburn Lough Mourne	Trout „ „ „	Fly only	...	10/– for citizens 20/– for others	Waterworks Office, Belfast
Birmingham: Elan Valley, Wales:	Cabancoch Penygareg Graiggoch Dolmynach	Trout „ „ „	Fly, worm, and minnow	2/6 Weekly, 10/6 Monthly, £2/2/0	£5/5/0	Water Department, Birmingham, or Corporation Estate Office, Rhayader, Wales

Near Birmingham:	Plants Brook Shustoke Whitacre	Pike, perch, roach Trout Trout and coarse fish	Any Fly only All sporting methods	Tickets to 30 £1/1/0 each. 50 tickets at	subscribers at £5/5/0 each.	Water Department, Birmingham
Blackpool .	Nickey Nook	Trout	Fishing rights reserved by		riparian owner.	...
Bolton . . .	Entwistle High Rid Springs Heaton Dingle Belmont	Trout Trout and perch Trout " " This is a made	Fly and bait 96-acre sheet of suitable for fish;	Leased to Bolling Associa water, but it moorland and	ton Joint Anglers. has not yet been peaty	T. W. Redford, Secy., 57 Dorset St., Bolton
Bradford . .	Leeming Doe Park	Trout Trout and coarse fish, pike	Any legal bait	Leased to Bradford City Angling Association and affiliated clubs. Visitors' tickets may be had through members.		Secy., 41 Thornhill Terrace
Bristol . . .	Blagdon	Trout	Fly; minnow in some parts	10/- from bank; £1/1/0 with boat	...	Waterworks Office, Bristol

Town.	Name of Reservoir.	Fish Contained.	Lure Allowed.	Day Ticket.	Season Ticket.	Where to Apply.
Burnley . .	Swinden No. 1 „ No. 2 Lee Green Cant Clough Hecknest	Trout „ „ „ „	...	Fishing rights reserved by landowners.		...
Cardiff . .	Beacons Cantreff Llanishen Lisvane	Trout „ „ „	Fly or artificial bait	2/6 Non-ratepayers allowed to fish only in Beacons and Cantreff at double these charges.	£1/1/0	City Treasurer, City Hall, Cardiff
Darwen . .	Earnsdale	Trout	...	Leased to Darwen Angling Association. Few day tickets to outsiders at 2/6.		...
Doncaster .	Thrybergh	Trout	Fly, worm after July 10	2/6; except in June and July, when 7/6 to non-residents	Not issued to non-residents	Borough Accountant, Doncaster
Douglas, Isle of Man . .	West Baldwin Clypse Kerrowdhoo	Trout „ „	Fly and artificial bait	1/– Ten for 5/–	£1/1/0	Town Hall, Douglas
Edinburgh .	Talla Gameshope	Trout „	Fly only	2/6; 10/– with boat	...	Water Trust Office, Edinburgh.

Fulwood (Lancs.) . .	Goosnargh	Trout	Fly, minnow at stated times	...	£1/1/0 ratepayers £1/11/6 non-ratepayers	Council Offices, Fulwood, near Preston.
Glasgow . .	Gorbal	Trout	Angling reserv	ed by riparian	owners	
Gloucester .	Witcomb No. 1 „ No. 2 „ No. 3	Trout and roach Trout Trout and roach	Fly and bottom fishing Fly only Fly and bottom fishing	Leased to Cheltenham Fishing Association. Outsiders allowed day tickets on introduction of members.		T. J. King, Ingogo, Coronation Road, Cheltenham
Halifax . .	Ogden Mixenden Ramsden Wood Albert and Victoria	Trout „ „ „	Fly and artificial minnow	2/-	£1/1/0 for 2 days weekly £2/2/0 for 4 days weekly £3/3/0 full season	Town Clerk, Halifax
Huddersfield	Blackmoor Foot Longwood Top Longwood Bottom Longwood Compensation Deerhill Holmstyes Bawshaw Black Sike	Pike and perch Pike, perch and few trout Perch Pike, perch, roach Roach Trout „ „	Fly, live bait, bottom fishing and spinning	Leased to Huddersfield Angling Association. Entrance £1/1/0; Sub., £1/1/0; ladies, 10/6 sub. and no entrance fee; outsiders 2/6 a day, but must be accompanied by a member.		Secy., 225 Thornton Road, Crosland Moor, Huddersfield.

Town.	Name of Reservoir.	Fish Contained.	Lure Allowed.	Day Ticket.	Season Ticket.	Where to Apply.
Ilfracombe .	Folly Valley Slade Valley	Trout „	Fly only	2/6	Weekly 7/6 Quarterly 15/– Season £1/5/0	Urban Council Office, Ilfracombe
Keighley . .	Ponden	Trout	Any lawful bait	1/–	Weekly 2/6 Season 10/–	Leased to Keighley Angling Club. Secy., William Barret, 17 Airville Street
Kendal . .	Fisher Tarn	Trout	No angling permitted at present			...
Kettering. .	Cransley	Trout	Fly only from boat. Minnow may be used from bank. Boat hire extra	1/– ratepayers 2/6 non-ratepayers 5/– strangers	...	Council Offices, Kettering
Kilmarnock .	North Craig Burnfoot Craigendunton Lochgoin	Trout „ „ „	Fishing reserved by superiors, who grant permits as they think fit			...
Lancaster . .	Abbeystead Blea Tarn Damas Gill	Trout „ „	Fishing rights reserved		...	...

Leeds . . .	Lakes, Roundhay	Trout and coarse fish	All methods	6d. to members of Leeds Amalgmation. 1/– non members	5/– from bank 7/6 „ boat boat hire extra	Town Hall, or Secy., Leeds Amalgamation
	Swinsty Fewston	Trout „	All methods	Free to Leeds 5/– to outsi	ratepayers. ders	Water Works Office, Leeds
Leicester . .	Thornton Cropton Swithland	Trout, perch Pike	Fishing righ	ts reserved	...	...
Liverpool . .	Rivington, Upper	Trout	Fly only	1/6 residents; 3/ non-residents	£1/1/0 residents; £2/2/0 non-residents	Water Department, Municipal Offices, Liverpool, or Town Hall, Chorley
	Rivington, Lower	„	„ and natural and artificial bait	1/6	£1/1/0	
	Anglezark	„	Fly only	Included in terms for Upper Rivington	Included in terms for Upper Rivington	
	Rake Brook	„	„ and natural and artificial bait			
	Raddlesworth Upper	„	Fly only			
	Raddlesworth, Lower	„ „	„ and natural and artificial bait			
	Yarrow	„	Fly only			
North Wales, *See* Vyrnwy,						

Town.	Name of Reservoir.	Fish Contained.	Lure Allowed.	Day Ticket.	Season Ticket.	Where to Apply.
Llangollen .	Dingle	Trout	No permits issued		...	...
Llanelly . .	Upper Cwmlleidi	Trout	Fly, worm, minnow	1/–	7/6	Secy., Llanelly Angling Association.
	Lower Cwmlleidi	,,				
	Trebeddod	,,				
Longsight (Lancs.) . .	Turton (2 lakes and streams)	Trout and coarse fish	All methods	1/–, 2/–, 5/–.	...	Wm. Broomhall, 22 Palm St., Longsight, Manchester
Loughborough	Blackbrook	Trout	Fly only	Rights reserved by riparian owner. Leased to local resident on 3 years' lease		
	Nanpanton	,,				
Macclesfield .	Langley	Trout, roach, perch	Any method but minnow	2/6 ratepayers 3/- non-ratepayers	26 day tickets 10/6 to ratepayers. 26 for £1/1/0 to non-ratepayers	Town Hall, Macclesfield
Manchester :						
Lake District .	Thirlmere	Trout, perch, pike	Fly and minnow	No charge.	Special permit needed	Town Hall, Manchester
Manchester District .	Audenshaw	Perch	Any method	1/-		,, ,,
	Gorton	,,	,,	1/-		,, ,,

Manchester (*continued*): Woodhead District .	Woodhead	Trout	Any method	...	10/6 to fish in whole series	Tickets for Cheshire side: Lord Tollemache's estate office, Tintwistle; for the Derbyshire side at Lord Howard of Glossop's estate office, Glossop
	Torside	„	„			
	Vale House	Trout and perch	„			
	Rhodes Wood	„ „	„			
	Bottoms	„ „	„			
Merthyr Tydfil . .	Upper Neuadd	Trout	Fly or artificial bait	1/-	All 3 resers. £1/1/0	Town Hall, Merthyr Tydfil
	Lower Neuadd	„	„	6d	5/-	
	Pentwyn	„	„	1/-	10/6	
Middlesbrough . .	Albert Park Lake	Trout and coarse fish	Any method	1/-	3/6 per week 10/6 per annum	Town Hall, Middlesbrough
	Balder and Lune	Trout	Fishing Rights reserved by landowner			
Newcastle on Tyne . .	Catcleugh	Trout	Fishing reserved by riparian owners			
	East Hallington	„				
	West Hallington	„				
	Colt Crag	„				
	Whittle Dean	„	Fly	2/6	10/6	Sec., Newcastle Water Co.

Town.	Name of Reservoir.	Fish Contained.	Lure Allowed.	Day Ticket.	Season Ticket.	Where to Apply.
Newport (Mon.) . .	Wentwood	Trout	Fly only. In July, Aug., and Sept. artificial minnow except in Ynis-y-fro	2/6	For one reservoir: £1/1/0 Half season 10/6 For all reservoirs, £2/2/0 Half season £1/1/0	Water Dept., Town Hall, Newport (Mon.)
	Pant-yr-eos	„		Visitors half as much again		
	Ynis-y-fro	„				
Northampton	Ravensthorpe	Trout and rudd	Fly from boat Fly and minnow from bank	5/- from bank 10/- with boat	...	Water Offices, Northampton
Oldham . .	Castleshaw Kitcliffe Ogden Strinesdale	Trout and some coarse fish	Fly and bottom fishing methods	6d.	5/-	Water Department, Greaves Street, Oldham
Oswestry . .	Penygwely	Trout	Closed at	present	...	...
Paisley . .	Staneley	Trout	Fly and minnow to a limited extent	Leased to Paisley Walton F. C.		
	Rowbank	„		„ Rowland F. C.		
	Harelaw	„		„ St. Mirren F. C.		
	Glenburn	„		„ Glenburn F. C.		
	Camphill	„		Free permits to ratepayers apply Town Clerk, Paisley		

Preston . .	Grimsargh, East Grimsargh, Middle	Trout „	This used to be good trout fishing, but the corporation have not allowed it for several years now.			Town Hall, Preston
Rhyl . . .	Cefndy Dolwen Plas Uchaf	Trout „ „	Fly to end of Aug., after then any bait	7/6 (with boat) 2/6 3/6	...	Water Dept., Rhyl
Rochdale . .	Cwm Wham Hamer Buckley Wood Spring Mill	Trout „ „ „ „	Fly only	At present not leased out. Anglers should apply for permits to the Water Works Office, Rochdale Leased to Rochdale Angling Society. Sec., 63 Rooley Moor Road		
Sheffield . .	Dam Flask Rivelin Redmires	Trout „ „	Fly, bait, or artificial minnow Rights reserved. Permits issued	2/6	20 day tickets for £1/11/6	Water Department, Town Hall, Sheffield. Duke of Norfolk's estate office, Sheffield
Swansea . .	Upper Lliw Lower „ Cray	Trout „ „	Ordinary methods „ Partially reserved. Special permits and boats	...	5/- to burgesses „	Water Office, Swansea

Town.	Name of Reservoir.	Fish Contained.	Lure Allowed.	Day Ticket.	Season Ticket.	Where to Apply.
Torquay . .	Lustleigh	Trout	Fly only	2/6 ratepayers	£1/1/0 month £2/2/0 season £5/5/0 non-ratepayers	Council Offices, Torquay
Vyrnwy, N. Wales . .	Lake Vyrnwy	Trout	Fly. Minnow in parts	2/6 to hotel visitors; boat 5/- extra	12/6 a week £2/0/0 a month	Lake Vyrnwy Hotel, N. Wales, via Oswestry
Warrington .	Walton	Trout	Fly and worm	1/6	10/6	Sir Gilbert Greenall's estate office, Warrington, or Angling Association, 11 Museum Street
Waterford .	Knockaderry	Trout	Fly only	2/6	...	Town Clerk, Waterford
Wigan. . .	Worthington Arley Adlington Orrell (1 and 2)	Trout ,, ,, ,,	Fly and bottom fishing methods	1/-	5/-	Water Engineer's office, Wigan